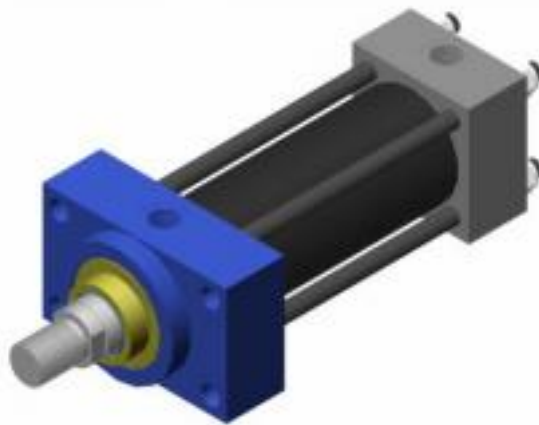




**ENERFLUID**

 **CILINDRI OLEODINAMICI  
SERIE ISO 6020/2**

 **HYDRAULIC CYLINDERS  
ISO 6020/2 SERIES**



 **VÉRINS HYDRAULIQUES  
SÉRIES 6020/2**

 **CILINDROS HIDRÁULICO  
SERIE 6020/2**



ENERFLUID progetta, costruisce e commercializza dal 1981, componenti oleodinamici e oleopneumatici. Con tale impegno ha ottenuto nel 1998 la certificazione del suo Sistema Qualità secondo la norma UNI ISO 9001, con l'obiettivo di soddisfare al meglio la clientela. I prodotti ENERFLUID sono realizzati con macchine CNC ad alta tecnologia. ENERFLUID è presente sul mercato Nazionale, Europeo ed extra Europeo.



Depuis 1981, la société ENERFLUID conçoit, fabrique et vente ses composants hydrauliques. Cet engagement a permis en 1998 la certification de l'entreprise suivant la norme UNI EN ISO 9001 avec l'objectif de satisfaire au mieux sa clientèle. Les produits ENERFLUID sont réalisés sur machines à commande numérique de haute technologie. ENERFLUID travaille sur le marché National, Européen et Extra-Européen.



With engagement and perseverance, ENERFLUID has been planning, manufacturing and selling oil-hydraulic and oil-pneumatic components 1981. With this engagements, ENERFLUID got the UNI EN ISO 9001 CERTIFICATION of its quality system in 1998, in order to satisfy better its customers. Its products are manufactured by CNC machine tools with high technology. ENERFLUID sales on the National, European and extra-European market.



Desde el 1981, la sociedad ENERFLUID proyecta construye y comercializa con empeño y tenacidad sus componentes hidraulicos. Este empeño ha permitido en 1998 la certificación de la sociedad según la norma UNI EN ISO 9001, con l'objetivo de la mejor satisfacción de la clientela. Los productos ENERFLUID son realizaados por máquinas CNC de alta tecnología. ENERFLUID obra en el mercado nacional, europeo y extra-europeo.



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 **CILINDRI SERIE ECTI**

I cilindri della serie ECTI sono costruiti secondo la normativa ISO 6020/2, con materiali di alta qualità e garantiscono un ottimo livello di efficienza.

• **PRESSIONE DI UTILIZZO**

**CILINDRI ECTI**

Pressione di esercizio continuo fino a 210 bar  
Pressione massima non continuativa: fino a picco di 250 bar

**CILINDRI ECTM**

Pressione di esercizio continuo fino a 120 bar  
Pressione massima non continuativa: fino a picco di 160 bar

A seguire tabella con formula per il calcolo della forza teorica prodotta dal cilindro in fase di spinta e trazione.

---

 **ECTI SERIES CYLINDERS**

*ECTI Series cylinders are manufactured by high quality raw materials under ISO 6020/2 norm and they ensure good efficiency level.*

• **FUNCTIONING PRESSURE**

**ECTI CYLINDERS**

*Continue working pressure till 210 bar  
Not continue maximum working pressure till the pick of 250 bar*

**ECTM CYLINDERS**

*Continue working pressure till 120 bar  
Not continue maximum working pressure till the pick of 160 bar*

*Table with formulation for calculation of theoretical force produced by the cylinder during thrust and traction phases.*

---

 **VÉRINS SERIES CTI**

*Les vérins de la séries ECTI sont produit par des matériaux de très bonne qualité selon la norme ISO 6020/2, ils assurent un bon niveau de efficience.*

• **PRESSION DE TRAVAIL**

**VERINS ECTI**

*Pression de travail en continue jusqu'à 210 bar  
Pression de travail ne pas en continue jusqu'à le culmine de 250 bar*

**VERINS ECTM**

*Pression de travail en continue jusqu'à 120 bar  
Pression de travail ne pas en continue jusqu'à le culmine de 160 bar*

*Tableau avec formule de calcul de la force théorique développé par le vérin pendant poussé et traction.*

---

 **CILINDROS SERIE ECTI**

*Los cilindros serie ECTI estan construidos segundo la norma ISO 6020/2, empleando materiales de alta calidad, aseguran un muy bueno nivel de eficiency.*

• **PRESION D'EMPLEO**

**CILINDROS ECTI**

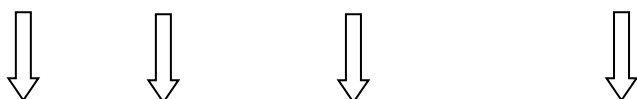
*Presion d'empleo en continuo hasta 210 bar  
Presion d'empleo non en continuo hasta el pico de 250 bar*

**CILINDRI ECTM**

*Presion d'empleo en continuo hasta 120 bar*

*Suive tabla con la fórmula para el cálculo de la fuerza teórica producida por el cilindro durante empuje y tracción.*

Alesaggio Bore Calibre Alesaje	Stelo Rod Tige Vastago	Area di spinta Thrust surface Surface de poussé Superficie d'empuje Cm2	Area di trazione Traction surface Surface de traction Superficie de tracción Cm2
---	---------------------------------	---	--



25	12	4,906	3,776
	18		2,363
32	14	8,038	6,500
	18		5,495
	22		4,239
40	18	12,560	10,017
	22		8,761
	28		6,406
50	22	19,625	15,826
	28		13,471
	36		9,451
63	28	31,157	25,002
	36		20,983
	45		15,260
80	36	50,240	40,066
	45		34,344
	56		25,622
100	45	78,500	62,604
	56		53,882
	70		40,035
125	56	122,656	98,039
	70		84,191
	90		59,071
160	70	200,960	162,495
	90		137,375
	110		105,975
200	90	314,000	250,415
	110		219,015
	140		160,140

### CALCOLO FORZA TEORICA

FORZA DI SPINTA IN kg. =  
 AREA DI SPINTA x PRESSIONE (bar)

FORZA DI TRAZIONE IN kg. =  
 AREA DI TRAZIONE x PRESSIONE  
 (bar)

### FORMULATION FOR THORETICAL FORCE

THRUST FORCE IN kg. =  
 THRUST SURFACE x PRESSURE (bar)

TRACTION FORCE IN kg. =  
 TRACTION SURFACE x PRESSURE  
 (bar)

### FORMULE FORCE THEORIQUE

FORCE DE POUSSE' EN kg. =  
 SURFACE POUSSE' x PRESSION (bar)

FORCE DE TRACTION EN kg. =  
 SURFACE TRACTION x PRESSION  
 (bar)

### FÓRMULA FUERZA TEÓRICA

FUERZA DE EMPUJE EN kg: =  
 SUPERFICIE EMPUJE x PRESION (bar)

FUERZA DE EMPUJE EN kg: =  
 SUPERFICIE TRACCIÓN x PRESION  
 (bar)

- **FISSAGGI SECONDO LA NORMA ISO 6020/2 -FASTENINGS UNDERS ISO 6020/2 NORM**



**MP3 – Cerniera maschio**



**MP5 – Cerniera a snodo**



**MS2 – Piedini laterali**



**MX1 – Tiranti anteriori e posteriori**



**MX2 – Tiranti posteriori**



**MX3 – Tiranti anteriori**



**MX5 – Diretto anteriore**



**MX6 – Diretto posteriore**



• **FRENATURA – BRAKING – FREINAGE - FRENADO**



La frenatura viene impiegata sui cilindri nelle applicazioni che prevedono una velocità superiore a 0,1 m/s o nel caso in cui vengano spostati pesi in direzione verticale.

Di seguito la formula per il calcolo della massa frenabile teorica in kg., per ogni cilindro:



Braking is installed on cylinders when the applications require a speed upper than 0,1 m/sec. or in case is required to move weights in vertical direction.

The following relation allows to calculate the theoretical braking mass in kgs., for each cylinder:



Le freinage est employé sur les vérins dans les applications qui prévoient une vitesse supérieure à 0,1 m/sec. où dans le cas il faut déplacer des poids en direction vertical

La formule suivante permet de calculer la masse théorique freinable en kgs., pour chaque vérin :



El frenado es empleado sobre los cilindros en las aplicaciones que necesitan una velocidad superior a 0,1 m/seg. y en el caso de deban mover pesos en sentido vertical.

A continuación se muestra la fórmula para el cálculo de la masa teórica en frenado en kg., para cada cilindro:

MASSA FRENABILE BRAKING MASS MASSE FREINABLE MASA FRENADO	$= \frac{(p_2 \times S_1 \text{ o } S_2 - p_1 \times A) \times 2 \times L_1 \text{ o } L_2}{V^2} \times 10^{-2}$
--	--

**p<sub>1</sub>** = Pressione di alimentazione (bar)  
 Feed pressure (bar)  
 Pression de alimentation (bar)  
 Presion de alimentacion (bar)

**p<sub>2</sub>** = Pressione massima (250 bar)  
 Maximum pressure (250 bar)  
 Pression maxi (250 bar)  
 Presion maxima (250 bar)

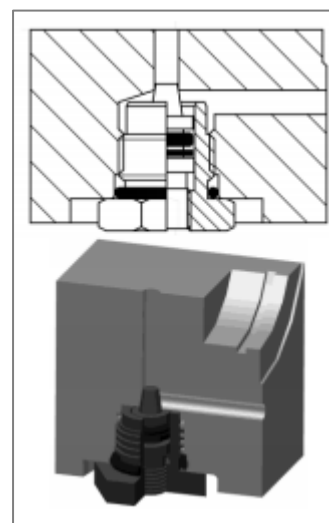
**V** = Velocità di lavoro ( m/s )  
 Work speed (m/sec.)  
 Vitesse de travail (m/sec.)  
 Velocidad de trabajo (m/seg.)

**S<sub>1</sub> o S<sub>2</sub>** = Sezione di frenatura (cm<sup>2</sup>)  
 Braking section (cm<sup>2</sup>)  
 Section de freinage (cm<sup>2</sup>)  
 Sección de frenado(cm<sup>2</sup>)

**L<sub>1</sub> o L<sub>2</sub>** = Lunghezza di frenatura (mm)  
 Braking length (mm)  
 Longueur de freinage (mm)  
 Longitud frenado (mm)

**A** = Area pistone (cm<sup>2</sup>)  
 Piston surface (cm<sup>2</sup>)  
 Surface du piston (cm<sup>2</sup>)  
 Superficie pistón (cm<sup>2</sup>)

Ø	S <sub>1</sub> (cm <sup>2</sup> ) stelo uscante	S <sub>2</sub> (cm <sup>2</sup> ) stelo rientrante	L <sub>1</sub> (mm) stelo uscante	L <sub>2</sub> (mm) stelo rientrante	A
25	1,77	4,52	19	19	4,906
32	3,52	6,91	19	19	8,038
40	5,50	11,43	28	28	12,560
50	7,68	18,5	29	29	19,625
63	13,07	29,39	29	29	31,157
80	21,98	46,45	29	29	50,240
100	35,51	74,70	31	29	78,500
125	51,81	118,86	31	29	122,656
160	98,94	190,79	35	40	200,960
200	144,37	303,83	38	40	314,000





• **DISTANZIALE – SPACER – ENTRETOISE - ESPACIADOR**



Possibilità di montaggio di diversi tipi di guarnizioni in relazione a temperatura, tipo di fluido utilizzato, coefficiente di attrito desiderato. Di seguito tabella esplicativa:



It's advisable to mount a spacer in the cylinders upper than 1000 mm stroke, to better the drive-ability of rod and piston.



Il est indiqué de monter un entretoise dans les vérins qui font plus que 1000 mm de course, pour améliorer le guidage de tige et du piston,



Es aconsejable montar un espaciador en los cilindros con carreras más largas de 1000 mm, para mejorar la capacidad de conducción de vástago y pistón.

• **GUARNIZIONI – SEALS – JOINTS - JUNTAS**



Possibilità di montaggio di diversi tipi di guarnizioni in relazione a temperatura, tipo di fluido utilizzato, coefficiente di attrito desiderato. Di seguito tabella esplicativa:



It's possible to mount many types of seals, in relation to working temperature, type of oil used, friction coefficient required. See at the following table:



Il est possible le montage de plusieurs types de joints, selon la température de travail, le type d'huile, le coefficient de frottement désiré. Voir le tableau ci-dessous:



Posibilidad de montaje de los diferentes tipos de juntas en relación a la temperatura, tipo de fluido utilizado, coeficiente de fricción deseado. Consulte la tabla

siguiente:

Sigla Acronym Referent Referencia	Descrizione Description Description Descripción	Materiale Material Matériel Material	Fluido Fluid Fluide Fluido	Pressione min. Min. pressure Pressione mini. Presión mínima	Temperatura Temperature Temperature Temperatura	Velocità max. Max. speed Vitesse maxi. Velocidad maxi.
S	Standard	NBR + POLIURETHANE	Mineral oil HH, HL, HLP, HLPD, HM	10 bar	da -40°C a +110°C	0,5 m/s
V	Viton	FKM + PTFE CARICATO BRONZO  FKM + PTFE BRONZE CHARGED  FKM + PTFE CHARGE' BRONZE  FKM + PTFE CARGADO BRONCE	Fluidi idraulici ignifughi, olio idraulico ad alta temperatura e/o ambienti con temp. superiore a 100 °C, fluidi idraulici speciali.  Fire resistant hydraulic fluids, hydraulic oil at high temperature and/or ambiente temp. above 100 °C, special hydraulic fluids.  Fluides hydrauliques ignifuges, huile hydraulique à haute température et/ou température . environnement au-dessus de 100°C, fluides hydrauliques spéciaux.  Fluidos hidráulicos resistentes al fuego, aceite hidráulico a alta temperatura y/o temperatura ambiente sobre de 100°C, fluidos hidráulicos especiales	10 bar	da -20°C a +150°C	1 m/s
G	Acqua glicola Glycol water Eau glicolée Agua glicola	NBR+ PTFE CARICATO BRONZO	Acqua glicola HFC HFC Glycol water Eau glicolée HFC Agua glicola HFC	10 bar	da -30°C a +120°C	0,5 m/s
T	Basso attrito Low fiction Faible frottement Baja fricción		Mineral oil HH, HL, HLP, HLPD, HM and HFC GLYCOL WATER	20 bar	da -30°C a +110°C	15 m/s

• **ESTREMITA' STELO - ROD END - FIN DE TIGE - EXTREMIDAD DE VASTAGO**



A= Filetto standard , F= filetto femmina, B= filetto maschio leggero, E= filetto femmina leggero, M= Martello



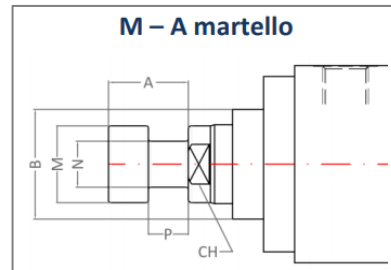
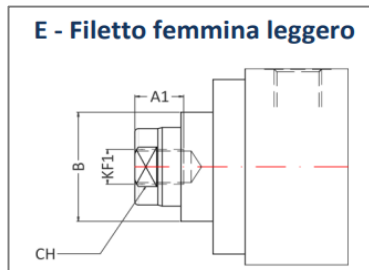
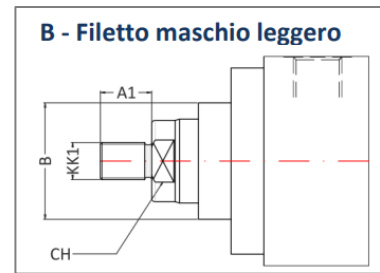
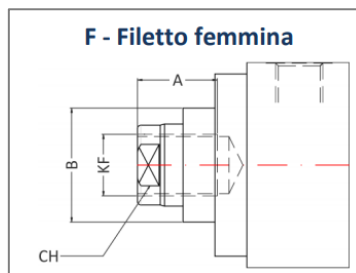
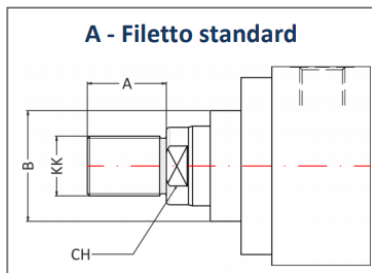
A=standard rod end, F=female rod end, B=minimum male rod end, E=minimum female rod end, M= hammer



A= fin de tige standard, F=femelle, B=mâle minimum, E=femelle minimum M= hammer



A=standard, F=hembra, B=macho minimo, E=hembra minimo, M= martillo



Ø AL	Ø ST	A	A1	B	CH	KK	KK1	KF	KF1	M	N	P
25	12	14	14	14	10	M10x1,25	M10x1,25	M8x1	M8x1	13	10	7
	18	18	14	30	15	M14x1,5	M10x1,25	M12x1,25	M8x1	17	12	9
32	14	16	16	26	12	M12x1,25	M12x1,25	M10x1,25	M10x1,25	15	11	8
	18	18	14	30	15	M14x1,5	M10x1,25	M12x1,25	M8x1	17	12	9
40	22	22	16	34	18	M16x1,5	M12x1,25	M16x1,5	M10x1,25	21	15	11
	18	18	14	30	15	M14x1,5	M10x1,25	M12x1,25	M8x1	17	12	9
	22	22	16	34	18	M16x1,5	M12x1,25	M16x1,5	M10x1,25	21	15	11
50	28	28	18	42	22	M20x1,5	M14x1,5	M20x1,5	M12x1,25	27	18	14
	22	22	16	34	18	M16x1,5	M12x1,25	M16x1,5	M10x1,25	21	15	11
	36	36	22	50	30	M27x2	M16x1,5	M27x2	M16x1,5	35	21	18
63	28	28	18	42	22	M20x1,5	M14x1,5	M20x1,5	M12x1,25	27	18	14
	36	36	22	50	30	M27x2	M16x1,5	M27x2	M16x1,5	35	21	18
	45	45	28	60	39	M33x2	M20x1,5	M33x2	M20x1,5	44	33	22,5
80	36	36	22	50	30	M27x2	M16x1,5	M27x2	M16x1,5	35	21	18
	45	45	28	60	39	M33x2	M20x1,5	M33x2	M20x1,5	44	33	22,5
	56	56	36	72	48	M42x2	M27x2	M42x2	M27x2	55	40	28
100	45	45	28	60	39	M33x2	M20x1,5	M33x2	M20x1,5	44	33	22,5
	56	56	36	72	48	M42x2	M27x2	M42x2	M27x2	55	40	28
	70	63	45	88	62	M48x2	M33x2	M48x2	M33x2	69	50	31,5
125	56	56	36	72	48	M42x2	M27x2	M42x2	M27x2	55	40	28
	70	63	45	88	62	M48x2	M33x2	M48x2	M33x2	69	50	31,5
	90	85	56	108	80	M64x3	M42x2	M64x3	M42x2	88	64	42,5
160	70	63	45	88	62	M48x2	M33x2	M48x2	M33x2	69	50	31,5
	90	85	56	108	80	M64x3	M42x2	M64x3	M42x2	88	64	42,5
	110	95	63	133	100	M80x3	M48x2	M80x3	M48x2	108	78	47,5
200	90	85	56	108	80	M64x3	M42x2	M64x3	M42x2	88	64	42,5
	110	95	63	133	100	M80x3	M48x2	M80x3	M48x2	108	78	47,5
	140	112	85	163	128	M100x3	M64x3	M100x3	M64x3	136	96	56

ECTI . 63 . 36 . ME5 . 100 . - . 3 . S . A . 11 . 22 . - . X

SERIE  
SERIES

FISSAGGIO  
FASTENING

CORSA  
STROKE

AMMORTIZZI  
AMMORTISE

ESTREMITA'  
STELO  
ROD ENDS

SFIATI ARIA  
AIR BREATHER

ESECUZIONI  
SPECIALI  
SPECIAL  
EXECUTIONS

STELO DA 12 A 140  
ROD FROM 12 TO 140

ALESAGGIO DA 25 A 200  
BORE FROM 25 TO 200

DOPPIO STELO  
DOUBLE ROD

GUARNIZIONI  
SEALS

POSIZIONE DELLE  
CONNESSIONI  
POSITION OF  
CONNECTIONS

DISTANZIALE  
SPACER

SERIE - SERIES	
ECTI	STANDARD STANDARD
ECTM	MAGNETICO MAGNETIC

DOPPIO STELO DOUBLE ROD	
-	NON PRESENTE NOT PRESENT
D	CON DOPPIO STELO WITH DOUBLE ROD

AMMORTIZZI AMMORTISE	
0	NON PRESENTE NOT PRESENT
1	ANTERIORE FRONT
2	POSTERIORE REAR
3	ANT. E POSTERIORE FRONT AND REAR

DISTANZIALE - SPACER Consigliato per corsa advisable for these stroke	
-	DA 0 A 1000 FORM 0 TO 1000
D1	DA 1000 A 1500 FORM 1000 TO 1500
D2	DA 1500 A 2000 FORM 1500 TO 2000
D3	DA 2000 A 2500 FORM 2000 TO 2500
D4	DA 2500 A 3000 FORM 2500 TO 3000
DX	A RICHIESTA UNDER REQUEST

FISSAGGIO - FASTENING	
ME5	FLANGIA ANTERIORE FRONT FLANGE
ME6	FLANGIA POSTERIORE REAR FLANGE
MT1	OSCILLANTE ANTERIORE FRONT AND SWINGING
MT2	OSCILLANTE POSTERIORE REAR AND SWINGING
MT4	OSCILLANTE INTERMEDIO MIDDLE AND SWINGING
MP1	CERNIERA FEMMINA FEMALE HINGE
MP3	CERNIERA MASCHIO MALE HINGE
MP5	CERNIERA SNODATA ARTICULATE JOINT HINGE
MS2	PIEDINI LATERALI SIDE SUPPORTS
MX1	TIRANTI ANTERIORI PROLUNGATI PROLONGED FRONT TIE RODS
MX2	TIRANTI POSTERIORI PROLUNGATI PROLONGED REAR TIE RODS
MX3	TIRANTI ANT. E POST. PROLUNGATI PROLONGED FRONT AND REAR TIE RODS
MX5	FORI FILETTATI ANTERIORI FRONT THREADED HOLES
MX6	FORI FILETTATI POSTERIORI REAR THREADED HOLES

GUARNIZIONI - SEALS	
S	STANDARD STANDARD
V	ALTA TEMPERATURA VITON
T	BASSO ATRITO LOW FRICTION
G	ACQUA GLICOLE GLYCOL WATER

ESTREMITA' STELO - ROD ENDS	
A	MASCHIO STANDARD MALE STANDARD
F	FEMMINA FEMALE
B	MASCHIO LEGGERO MINIMUM MALE
E	FEMMINA LEGGERO MINIMUM FEMALE
M	A MARTELLO HAMMER
D	SPECIALE A DISEGNO SPECIAL ON DRAWING

SFIATI ARIA - AIR BREATHER	
-	NON PRESENTI NOT PRESENT
1-4	TESTA HEAD
1-4	FONDO BOTTOM

POS. DELLE CONNESSIONI POSITION OF CONNECTIONS	
1-4	TESTA HEAD
1-4	FONDO BOTTOM

## SEZIONE ECTI - CON FRENATURA ANTERIORE E POSTERIORE

**ECTI SECTION - WITH FRONT AND REAR BRAKING**

**SECTION ECTI - AVEC FREINAGE AVANT ET ARRIÈRE**

**SECCIÓN ECTI - CON FRENADO DELANTERO Y POSTERIOR**



**ENERFLUID**



### **POSIZIONE CONNESSIONI, AMMORTIZZO E SFIATI ARIA**

Per tutti i fissaggi, a eccezione del tipo MS2, le connessioni sono posizionate sul lato 1, le regolazioni di ammortizzo sul lato 3 gli sfiati aria sul lato 2.

Per il fissaggio tipo MS2 le connessioni sono poste sul lato 1, le regolazioni di ammortizzo sul lato 4 e gli sfiati aria sul lato 2.



### **FASTENING POSITION, ABSORBER REGULATION AND AIR BREATHER**

All fastenings, excepting MS2 type, have connections positioned on side 1, the absorber regulations on side 3 and air breathers on side 2.

Fastening type MS2 has connections positioned on side 1, the absorber regulations on side 4 and air breathers on side 2.



### **POSITION DES FIXATIONS, REGULATIONS DE L'AMORTISSEUR ET ECHAPPEMENTS D'AIR**

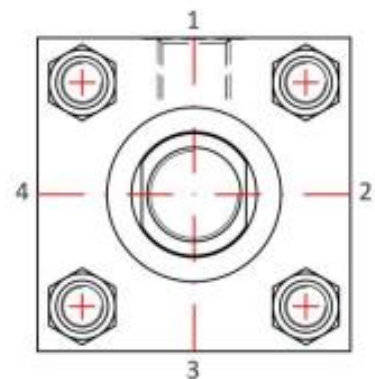
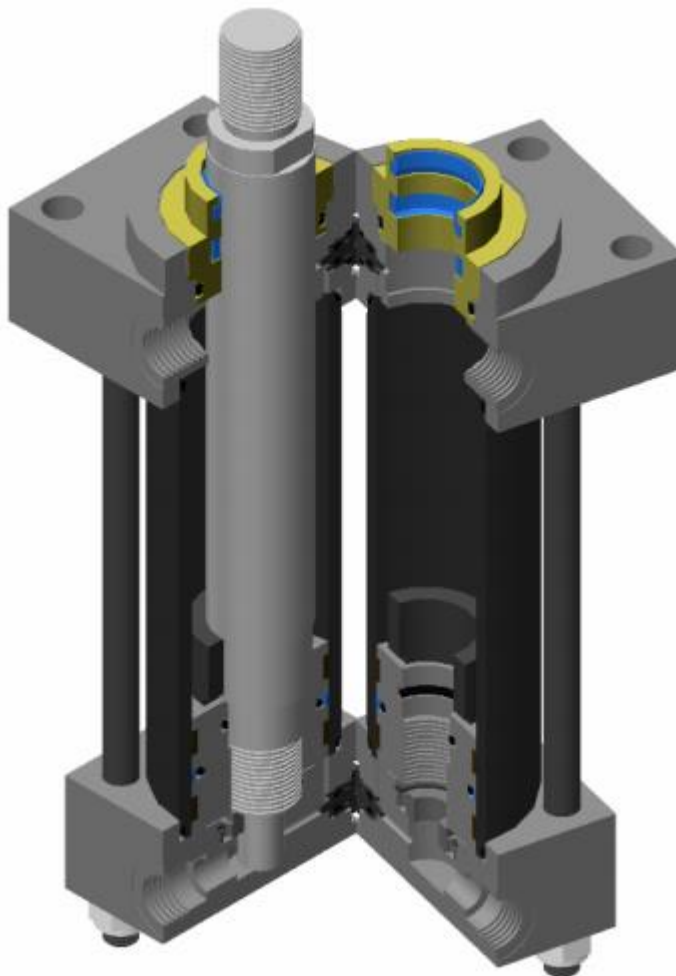
Pour tous les fixations, sauf que le type MS2, les connections sont positionnés sur le côté 1, les régulations de l'amortisseur sur le côté 3 et les échappements d'air sur le côté 2.

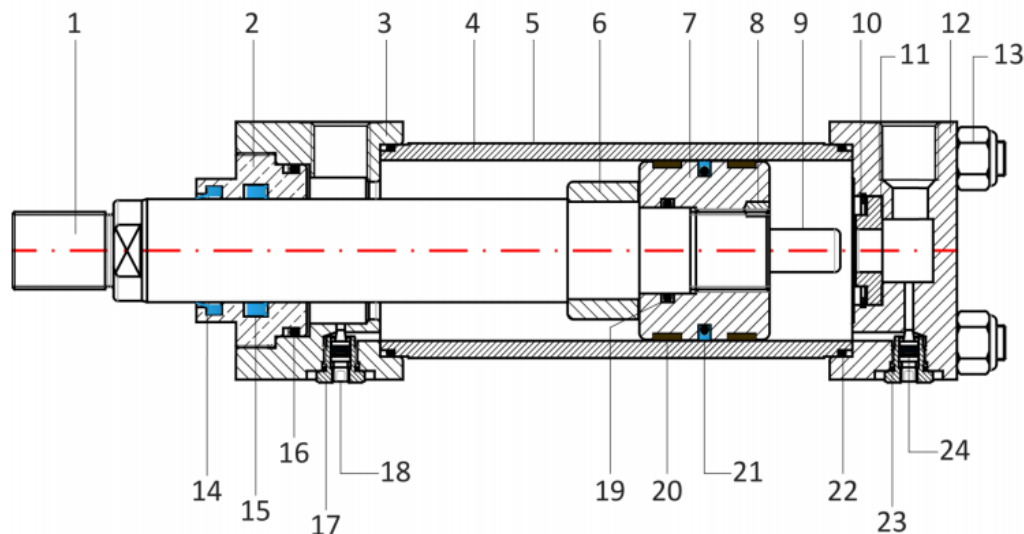
Sur le type MS2 les connections sont positionnés sur le côté 1, les régulations de l'amortisseur sur le côté 4 et les échappements d'air sur le côté 2.



### **POSICIONES DE LAS CONEXIONES, REGULACIONES DE L'AMORTIZE Y VENTILACION DE L'AIRE**

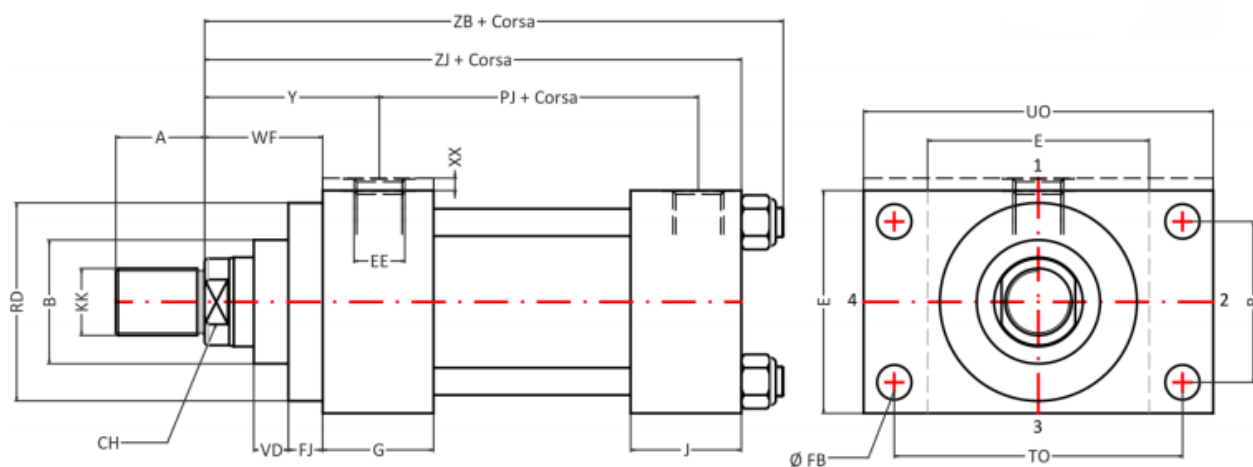
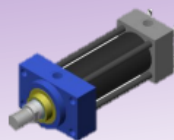
Todas las conexiones, menos que el tipo MS2, estan positionado sul lado 1, las regulaciones de l'amortize sul lado 3 y la ventilación de l'aire sul lado 2. En el tipo MS2, las conexiones estan positionado sul lado 1, las regulaciones de l'amortize sul lado 4 y la ventilación de l'aire sul lado 2.





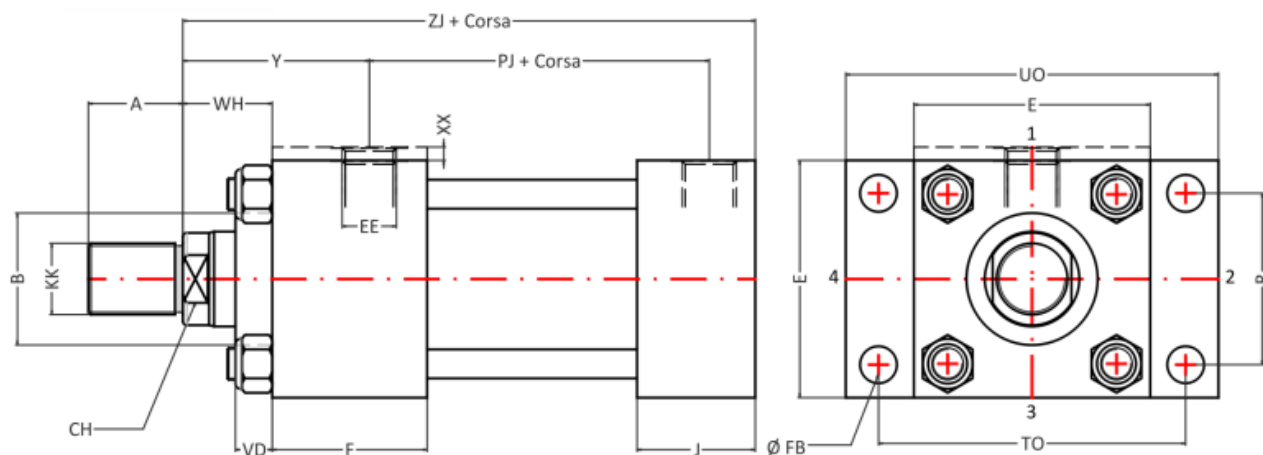
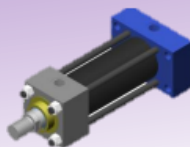
POS	PART	MATERIAL	Q.TY	POS	PART	MATERIAL	Q.TY
1	stelo - rod - tige - vastago	Acciaio - Steel Acier - Aciero 39NiCrMo3	1	13	Dado autobloccante Self-locking nut Écrou auto-bloquant Tuerca autobloccante	Acciaio - Steel Acier - Aciero	4
2	Bussola di guida - guidance bushing bague de guidage bujes de guía	Bronze	1	14	Raschiapolvere - dust-scraper cache-poussière guardapolvo	Poliurethane	1
3	Testata anteriore - front head Flange avant - brida delantera	Acciaio - Steel Acier - Aciero	1	15	Guarnizione - seal - joint - junto	Poliurethane	1
4	tubo - tube - tube - tubo	Acciaio - Steel Acier - Aciero	1	16	Guarnizione e antiestrusione - seal and antiextrusion - joint et antiextrusion junto y antiesxtrusion	NBR70 + NBR90 SH.	1
5	Tirante - tie rod - tirant - tirante	Acciaio - Steel Acier - Aciero R80	4	17	Cartuccia ammortizzo - cartridge absorber - cartouche de amortissage cartucho de amortize	acciaio temp. tempered steel acier trempé acero endurecido	2
6	Bussola freno ant. - bushing bague - buje	acciaio temp. tempered steel acier trempé acero endurecido	1	18	Spillo di regolazione - pin - broche - pin	acciaio temp. tempered steel acier trempé acero endurecido	2
7	Pistone - piston - piston - pistón	Acciaio - Steel Acier - Aciero	1	19	Guarnizione - seal - joint - junto	NBR70	1
8	grano antisvit. - security grain grain de sécurité grano de seguridad	Acciaio - Steel Acier - Aciero R80	1	20	Pattino antifrizione - Antifricition part - pièce antifricition - pieza anti-fricción	PTFE	2
9	Freno fine corsa end stroke brake Frein fin course freno final de carrera	Acciaio - Steel Acier - Aciero 39NiCrMo3	1	21	Guarnizione - seal - joint - junto	Poliurethane + NBR70 SH.	1
10	Seeger - stop ring anneau d'arrêt Anillo de seguridad	acciaio temp. tempered steel acier trempé acero endurecido	1	22	Guarnizione e antiestrusione - seal and antiextrusion - joint et antiextrusion junto y antiesxtrusion	NBR70 + NBR90 SH.	2
11	Bussola freno post. - bushing bague - buje	Acciaio - Steel Acier - Aciero 9SMnPb36	1	23	Guarnizione - seal - joint - junto	NBR70	2
12	Testata post. - rear head Flange arrière - brida posterior	Acciaio - Steel Acier - Aciero	1	24	Guarnizione e antiestrusione seal and antiextrusion - joint et antiextrusion junto y antiesxtrusion	NBR70 + NBR90 SH.	2

**FLANGIA ANTERIORE – ME5 ISO 6020/2**  
**FRONT FLANGE MODEL – ME5 ISO 6020/2**  
**FLANGE ANTERIEURE – ME5 ISO 6020/2**  
**BRIDA DELANTERA – ME5 ISO 6020/2**



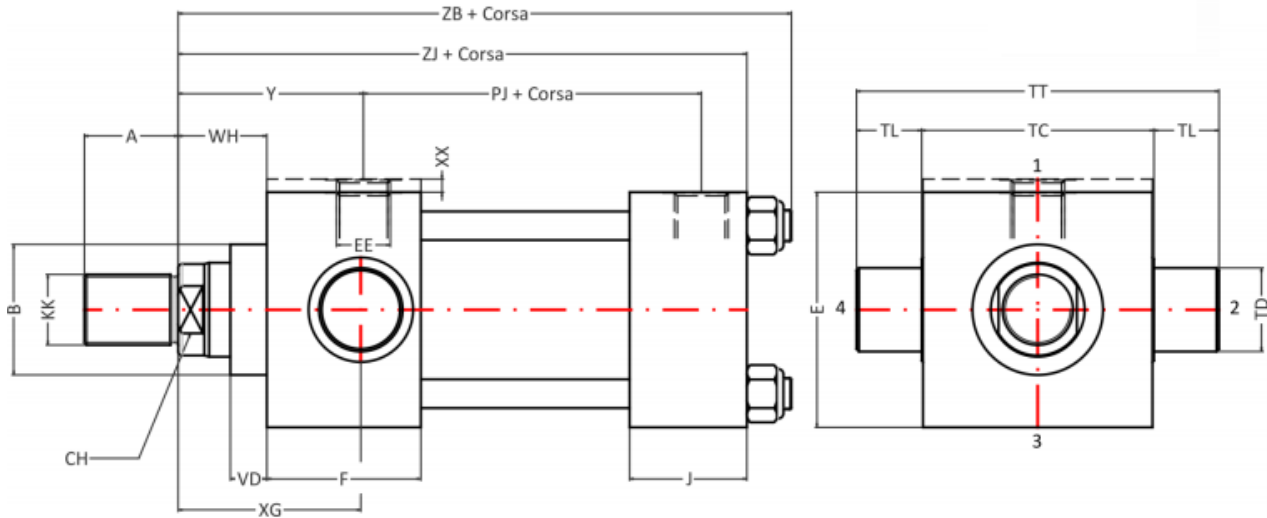
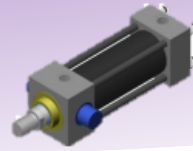
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25	12	14	24	10	40	¼"	5,5	9	40	33	M10x1,25	53	27	38	51	64	6	25	50	121	114	5
	18	18	30	15							M14x1,5											
32	14	16	26	12	45	¼"	6,6	9	40	32	M12x1,25	56	33	42	58	70	11	35	60	137	128	5
	18	18	30	15							M14x1,5											
	22	22	34	18							M16x1,5											
40	18	18	30	15	60	3/8"	11	10	45	45	M14x1,5	73	41	62	87	106	7	35	62	166	153	-
	22	22	34	18							M16x1,5						7					
	28	28	42	22							M20x1,5						10					
50	22	22	34	18	75	½"	14	14	45	45	M16x1,5	74	52	74	105	128	7	41	67	176	159	-
	28	28	42	22							M20x1,5						7					
	36	36	50	30							M27x2						10					
63	28	28	42	22	90	½"	14	14	45	45	M20x1,5	80	65	75	117	142	7	48	71	185	168	-
	36	36	50	30							M27x2			88			10					
	45	45	60	39							M33x2			88			12					
80	36	36	50	30	114	¾"	18	19	50	50	M27x2	93	83	82	149	180	5	51	77	212	190	-
	45	45	60	39							M33x2			105			9					
	56	56	72	48							M42x2			105			9					
100	45	45	60	39	130	¾"	18	19	50	50	M33x2	101	97	92	162	200	9	57	82	225	203	-
	56	56	72	48							M42x2			125			9					
	70	63	88	62							M48x2			125			10					
125	56	56	72	48	165	1"	22	21	58	63	M42x2	117	126	105	208	250	9	57	86	260	232	-
	70	63	88	62							M48x2			150			10					
	90	85	108	80							M64x3			150			10					
160	70	63	88	62	200	1"	26	21	58	63	M48x2	130	155	125	253	300	11	57	86	279	245	-
	90	85	108	80							M64x3			170			11					
	110	95	133	100							M80x3			170			11					
200	90	85	108	80	245	1"	33	24	80	78	M64x3	165	190	150	300	360	8	57	98	336	299	-
	110	95	133	100							M80x3			210			8					
	140	112	163	128							M100x3			210			8					

**FLANGIA POSTERIORE – ME6 ISO 6020/2**  
**REAR FLANGE MODEL – ME6 ISO 6020/2**  
**FLANGE POSTERIEURE – ME6 ISO 6020/2**  
**BRIDA POSTERIOR – ME6 ISO 6020/2**



Ø AL	Ø ST	A	B	CH	E	EE	FB	F	J	KK	PJ	R	TO	UO	VD	WH	Y	ZJ	XX
25	12	14	24	10	40	1/4"	5,5	50	33	M10x1,25	53	27	51	64	6	15	50	114	5
	18	18	30	15						M14x1,5									
32	14	16	26	12	45	1/4"	6,6	50	32	M12x1,25	56	33	58	70	11	25	60	128	5
	18	18	30	15						M14x1,5									
	22	22	34	18						M16x1,5									
40	18	18	30	15	60	3/8"	11	55	45	M14x1,5	73	41	87	106	7	25	62	153	-
	22	22	34	18						M16x1,5									
	28	28	42	22						M20x1,5									
50	22	22	34	18	75	1/2"	14	61	45	M16x1,5	74	52	105	128	7	25	67	159	-
	28	28	42	22						M20x1,5									
	36	36	50	30						M27x2									
63	28	28	42	22	90	1/2"	14	61	45	M20x1,5	80	65	117	142	7	32	71	168	-
	36	36	50	30						M27x2									
	45	45	60	39						M33x2									
80	36	36	50	30	114	3/4"	18	70	50	M27x2	93	83	149	180	5	31	77	190	-
	45	45	60	39						M33x2									
	56	56	72	48						M42x2									
100	45	45	60	39	130	3/4"	18	72	50	M33x2	101	97	162	200	9	35	82	203	-
	56	56	72	48						M42x2									
	70	63	88	62						M48x2									
125	56	56	72	48	165	1"	22	80	63	M42x2	117	126	208	250	9	35	86	232	-
	70	63	88	62						M48x2									
	90	85	108	80						M64x3									
160	70	63	88	62	200	1"	26	83	63	M48x2	130	155	253	300	11	32	86	245	-
	90	85	108	80						M64x3									
	110	95	133	100						M80x3									
200	90	85	108	80	245	1" 1/4"	33	105	78	M64x3	165	190	300	360	8	32	98	299	-
	110	95	133	100						M80x3									
	140	112	163	128						M100x3									

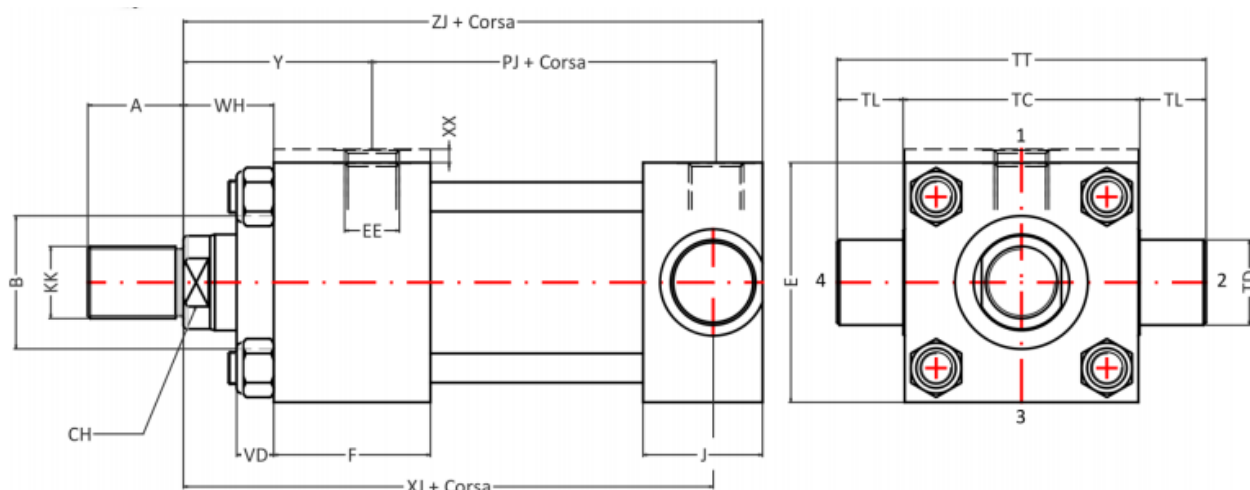
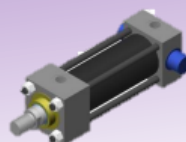
**OSCILLANTE ANTERIORE – MT1 ISO 6020/2**  
**FRONT SWINGING – MT1 ISO 6020/2**  
**OSCILLANT ANTERIEURE – MT1 ISO 6020/2**  
**OSCILANTE DELANTERO – MT1 ISO 6020/2**



Ø AL	Ø ST	A	B	CH	E	EE	F	J	KK	PJ	TC	TD	TL	TT	VD	WH	XG	Y	ZB	ZJ	XX
25	12	14	24	10	40	1/4"	50	33	M10x1,25	53	38	12	10	58	6	15	44	50	121	114	5
	18	18	30	15					M14x1,5												
32	14	16	26	12	45	1/4"	50	32	M12x1,25	56	44	16	12	68	11	25	54	60	137	128	5
	18	18	30	15					M14x1,5												
	22	22	34	18					M16x1,5												
40	18	18	30	15	60	3/8"	55	45	M14x1,5	73	63	20	16	95	7	25	57	62	166	153	-
	22	22	34	18					M16x1,5						7						
	28	28	42	22					M20x1,5						10						
50	22	22	34	18	75	1/2"	61	45	M16x1,5	74	76	25	20	116	7	25	64	67	176	159	-
	28	28	42	22					M20x1,5						7						
	36	36	50	30					M27x2						10						
63	28	28	42	22	90	1/2"	61	45	M20x1,5	80	89	32	25	139	7	32	70	71	185	168	-
	36	36	50	30					M27x2						10						
	45	45	60	39					M33x2						12						
80	36	36	50	30	114	3/4"	70	50	M27x2	93	114	40	32	178	5	31	79	77	212	190	-
	45	45	60	39					M33x2						9						
	56	56	72	48					M42x2						9						
100	45	45	60	39	130	3/4"	72	50	M33x2	101	127	50	40	207	9	35	71	82	225	203	-
	56	56	72	48					M42x2						9						
	70	63	88	62					M48x2						10						
125	56	56	72	48	165	1"	80	63	M42x2	117	165	63	50	265	9	35	75	86	260	232	-
	70	63	88	62					M48x2						10						
	90	85	108	80					M64x3						10						
160	70	63	88	62	200	1"	83	63	M48x2	130	203	80	63	329	11	32	75	86	279	245	-
	90	85	108	80					M64x3						11						
	110	95	133	100					M80x3						11						
200	90	85	108	80	245	1 1/4"	105	78	M64x3	165	241	100	80	401	8	32	85	98	336	299	-
	110	95	133	100					M80x3						8						
	140	112	163	128					M100x3						8						



**OSCILLANTE POSTERIORE – MT2 ISO 6020/2**  
**REAR SWINGING – MT2 ISO 6020/2**  
**OSCILLANT POSTERIEUR – MT2 ISO 6020/2**  
**OSCILANTE POSTERIOR – MT2 ISO 6020/2**



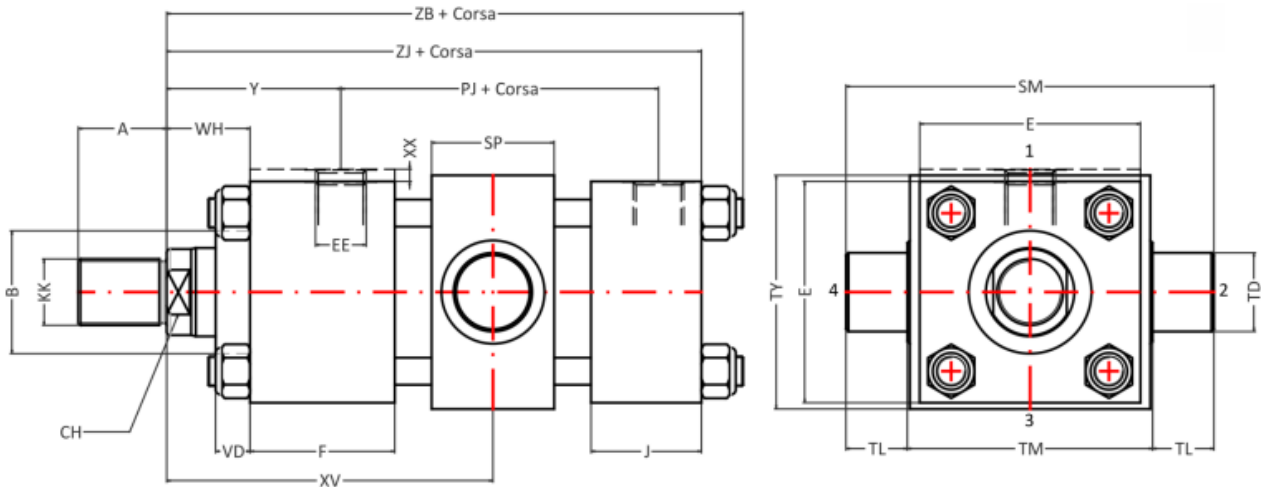
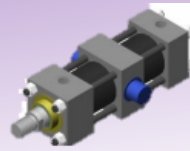
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	18	18	30	15					M14x1,5											
32	14	16	26	12	45	1/4"	50	32	M12x1,25	56	44	16	12	68	11	25	115	60	128	5
	18	18	30	15					M14x1,5											
	22	22	34	18					M16x1,5											
40	18	18	30	15	60	3/8"	55	45	M14x1,5	73	63	20	16	95	7	25	134	62	153	-
	22	22	34	18					M16x1,5						7					
	28	28	42	22					M20x1,5						10					
50	22	22	34	18	75	1/2"	61	45	M16x1,5	74	76	25	20	116	7	25	140	67	159	-
	28	28	42	22					M20x1,5						7					
	36	36	50	30					M27x2						10					
63	28	28	42	22	90	1/2"	61	45	M20x1,5	80	89	32	25	139	7	32	149	71	168	-
	36	36	50	30					M27x2						10					
	45	45	60	39					M33x2						12					
80	36	36	50	30	114	3/4"	70	50	M27x2	93	114	40	32	178	5	31	168	77	190	-
	45	45	60	39					M33x2						9					
	56	56	72	48					M42x2						9					
100	45	45	60	39	130	3/4"	72	63	M33x2	101	127	50	40	207	9	35	187	82	216	-
	56	56	72	48					M42x2						9					
	70	63	88	62					M48x2						10					
125	56	56	72	48	165	1"	80	77	M42x2	117	165	63	50	265	9	35	209	86	246	-
	70	63	88	62					M48x2						10					
	90	85	108	80					M64x3						10					
160	70	63	88	62	200	1"	83	94	M48x2	130	203	80	63	329	11	32	230	86	276	-
	90	85	108	80					M64x3						11					
	110	95	133	100					M80x3						11					
200	90	85	108	80	245	1 1/4"	105	111	M64x3	165	241	100	80	401	8	32	276	98	332	-
	110	95	133	100					M80x3						8					
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**OSCILLANTE INTERMEDIO – MT4 ISO 6020/2**

**MIDDLE SWINGING – MT4 ISO 6020/2**

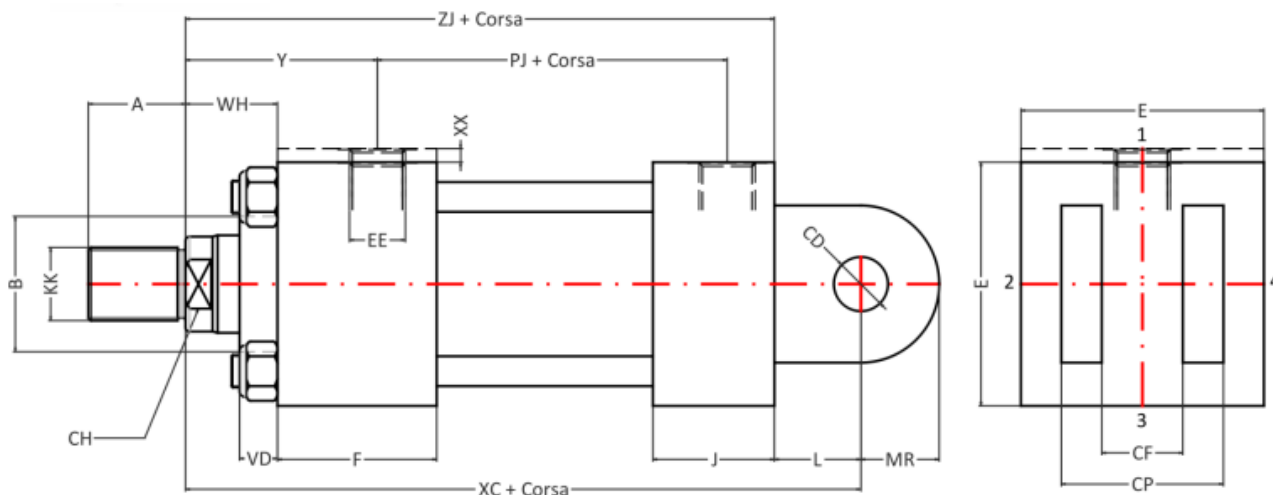
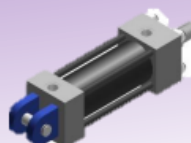
**OSCILLANT AU MILIEU – MT4 ISO 6020/2**

**OSCILANTE MEDIO – MT4 ISO 6020/2**



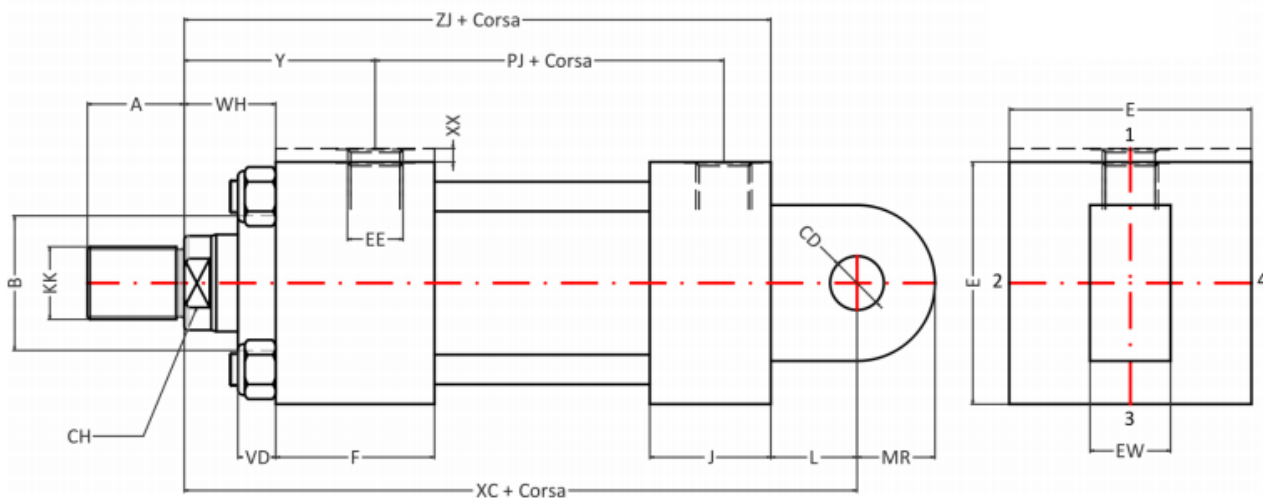
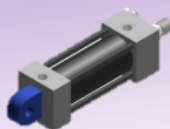
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	18	18	30	15					M14x1,5													
32	14	16	26	12	45	1/4"	50	32	M12x1,25	56	79	25	16	12	55	52	25	88	60	137	128	5
	18	18	30	15					M14x1,5													
	22	22	34	18					M16x1,5													
40	18	18	30	15	60	3/8"	55	45	M14x1,5	73	108	30	20	16	76	76	25	95	62	166	153	-
	22	22	34	18					M16x1,5													
	28	28	42	22					M20x1,5													
50	22	22	34	18	75	1/2"	61	45	M16x1,5	74	129	40	25	20	89	90	25	106	67	176	159	-
	28	28	42	22					M20x1,5													
	36	36	50	30					M27x2													
63	28	28	42	22	90	1/2"	61	45	M20x1,5	80	150	50	32	25	100	95	32	118	71	185	168	-
	36	36	50	30					M27x2													
	45	45	60	39					M33x2													
80	36	36	50	30	114	3/4"	70	50	M27x2	93	191	50	40	32	127	120	31	126	77	212	190	-
	45	45	60	39					M33x2													
	56	56	72	48					M42x2													
100	45	45	60	39	130	3/4"	72	50	M33x2	101	220	60	50	40	140	140	35	137	82	225	203	-
	56	56	72	48					M42x2													
	70	63	88	62					M48x2													
125	56	56	72	48	165	1"	80	63	M42x2	117	278	70	63	50	178	178	35	150	86	260	232	-
	70	63	88	62					M48x2													
	90	85	108	80					M64x3													
160	70	63	88	62	200	1"	83	63	M48x2	130	341	90	80	63	215	216	32	160	86	279	245	-
	90	85	108	80					M64x3													
	110	95	133	100					M80x3													
200	90	85	108	80	245	1 1/4"	105	78	M64x3	165	439	110	100	80	279	280	32	192	98	336	299	-
	110	95	133	100					M80x3													
	140	112	163	128					M100x3													

**CERNIERA FEMMINA – MP1 ISO 6020/2**  
**FEMALE HINGE – MP1 ISO 6020/2**  
**CHARNIERE FEMELLE – MP1 ISO 6020/2**  
**CIERRE HEMBRA – MP1 ISO 6020/2**



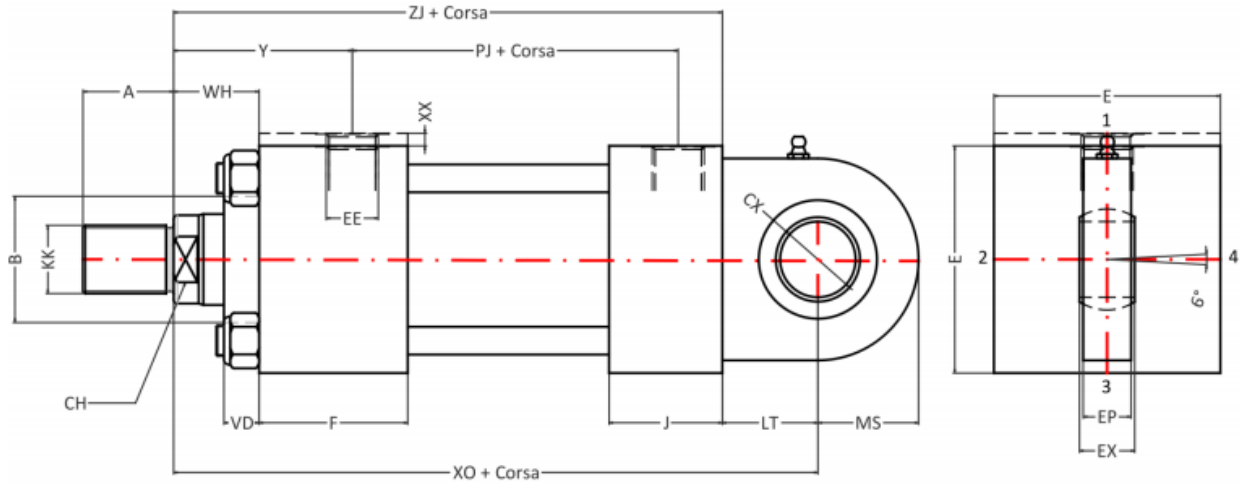
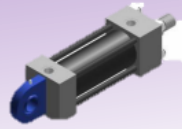
Ø AL	Ø ST	A	B	CH	E	EE	F	J	KK	PJ	CD	CP	CF	L	MR	VD	WH	Y	XC	ZJ	XX
25	12	14	24	10	40	1/4"	50	33	M10x1,25	53	10	24	12	13	12	6	15	50	127	114	5
	18	18	30	15					M14x1,5												
32	14	16	26	12	45	1/4"	50	32	M12x1,25	56	12	32	16	19	17	11	25	60	147	128	5
	18	18	30	15					M14x1,5												
	22	22	34	18					M16x1,5												
40	18	18	30	15	60	3/8"	55	45	M14x1,5	73	14	40	20	19	17	7	25	62	172	153	-
	22	22	34	18					M16x1,5												
	28	28	42	22					M20x1,5												
50	22	22	34	18	75	1/2"	61	45	M16x1,5	74	20	60	30	32	29	7	25	67	191	159	-
	28	28	42	22					M20x1,5												
	36	36	50	30					M27x2												
63	28	28	42	22	90	1/2"	61	45	M20x1,5	80	20	60	30	32	29	7	32	71	200	168	-
	36	36	50	30					M27x2												
	45	45	60	39					M33x2												
80	36	36	50	30	114	3/4"	70	50	M27x2	93	28	80	40	39	34	8	31	77	229	190	-
	45	45	60	39					M33x2												
	56	56	72	48					M42x2												
100	45	45	60	39	130	3/4"	72	50	M33x2	101	36	100	50	54	50	9	35	82	257	203	-
	56	56	72	48					M42x2												
	70	63	88	62					M48x2												
125	56	56	72	48	165	1"	80	63	M42x2	117	45	120	60	57	53	9	35	86	289	232	-
	70	63	88	62					M48x2												
	90	85	108	80					M64x3												
160	70	63	88	62	200	1"	83	63	M48x2	130	56	140	70	63	59	11	32	86	308	245	-
	90	85	108	80					M64x3												
	110	95	133	100					M80x3												
200	90	85	108	80	245	1 1/4"	105	78	M64x3	165	70	160	80	82	78	8	32	98	381	299	-
	110	95	133	100					M80x3												
	140	112	163	128					M100x3												

**CERNIERA MASCHIO – MP3 ISO 6020/2**  
**MALE HINGE – MP3 ISO 6020/2**  
**CHARNIERE MALE – MP3 ISO 6020/2**  
**CIERRE MACHO – MP3 ISO 6020/2**



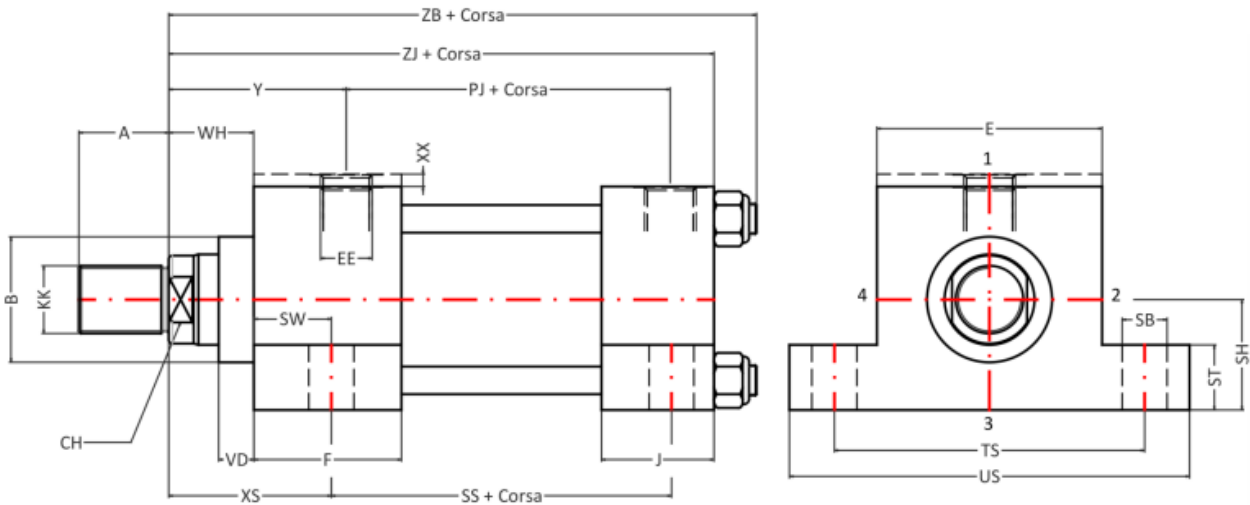
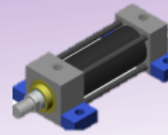
Ø AL	Ø ST	A	B	CH	E	EE	F	J	KK	PJ	CD	EW	L	MR	VD	WH	Y	XC	ZJ	XX
25	12	14	24	10	40	1/4"	50	33	M10x1,25	53	10	12	13	12	6	15	50	127	114	5
	18	18	30	15					M14x1,5											
32	14	16	26	12	45	1/4"	50	32	M12x1,25	56	12	16	19	17	11	25	60	147	128	5
	18	18	30	15					M14x1,5											
	22	22	34	18					M16x1,5											
40	18	18	30	15	60	3/8"	55	45	M14x1,5	73	14	20	19	17	7	25	62	172	153	-
	22	22	34	18					M16x1,5											
	28	28	42	22					M20x1,5											
50	22	22	34	18	75	1/2"	61	45	M16x1,5	74	20	30	32	29	7	25	67	191	159	-
	28	28	42	22					M20x1,5											
	36	36	50	30					M27x2											
63	28	28	42	22	90	1/2"	61	45	M20x1,5	80	20	30	32	29	7	32	71	200	168	-
	36	36	50	30					M27x2											
	45	45	60	39					M33x2											
80	36	36	50	30	114	3/4"	70	50	M27x2	93	28	40	39	34	5	31	77	229	190	-
	45	45	60	39					M33x2											
	56	56	72	48					M42x2											
100	45	45	60	39	130	3/4"	72	50	M33x2	101	36	50	54	50	9	35	82	257	203	-
	56	56	72	48					M42x2											
	70	63	88	62					M48x2											
125	56	56	72	48	165	1"	80	63	M42x2	117	45	60	57	53	9	35	86	289	232	-
	70	63	88	62					M48x2											
	90	85	108	80					M64x3											
160	70	63	88	62	200	1"	83	63	M48x2	130	56	70	63	59	11	32	86	308	245	-
	90	85	108	80					M64x3											
	110	95	133	100					M80x3											
200	90	85	108	80	245	1 1/4"	105	78	M64x3	165	70	80	82	78	8	32	98	381	299	-
	110	95	133	100					M80x3											
	140	112	163	128					M100x3											

**CERNIERA SNODATA – MP5 ISO 6020/2**  
**ARTICULATE JOINT HINGE– MP5 ISO 6020/2**  
**CHARNIERE DENOUE' – MP5 ISO 6020/2**  
**CIERRE ARTICULADO – MP5 ISO 6020/2**



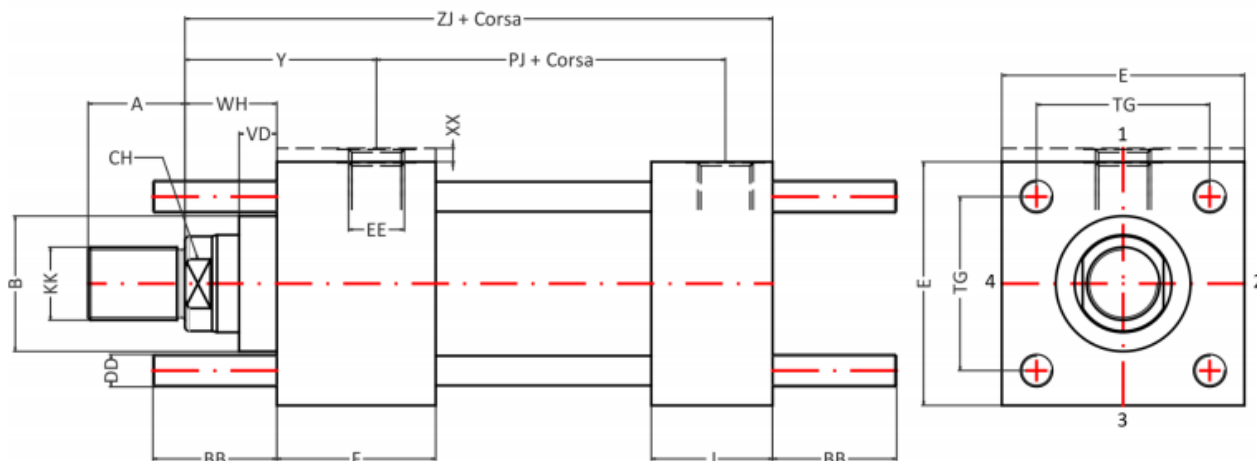
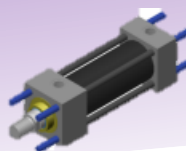
Ø AL	Ø ST	A	B	CH	CX	E	EE	EP	EX	F	J	KK	LT	MS	PJ	VD	WH	XO	Y	ZJ	XX
25	12	14	24	10	12	40	1/4"	8	10	50	33	M10x1,25	16	20	53	6	15	130	50	114	5
	18	18	30	15								M14x1,5									
32	14	16	26	12	16	45	1/4"	11	14	50	32	M12x1,25	20	22	56	11	25	148	60	128	5
	18	18	30	15								M14x1,5									
	22	22	34	18								M16x1,5									
40	18	18	30	15	20	60	3/8"	13	16	55	45	M14x1,5	25	29	73	7	25	178	62	153	-
	22	22	34	18								M16x1,5									
	28	28	42	22								M20x1,5									
50	22	22	34	18	25	75	1/2"	17	20	61	45	M16x1,5	31	33	74	7	25	190	67	159	-
	28	28	42	22								M20x1,5									
	36	36	50	30								M27x2									
63	28	28	42	22	30	90	1/2"	19	22	61	45	M20x1,5	387	40	80	7	32	206	71	168	-
	36	36	50	30								M27x2									
	45	45	60	39								M33x2									
80	36	36	50	30	40	114	3/4"	23	28	70	50	M27x2	48	50	93	5	31	238	77	190	-
	45	45	60	39								M33x2									
	56	56	72	48								M42x2									
100	45	45	60	39	50	130	3/4"	30	35	72	50	M33x2	58	62	101	9	35	261	82	203	-
	56	56	72	48								M42x2									
	70	63	88	62								M48x2									
125	56	56	72	48	60	165	1"	38	44	80	63	M42x2	72	80	117	9	35	304	86	232	-
	70	63	88	62								M48x2									
	90	85	108	80								M64x3									
160	70	63	88	62	80	200	1"	47	55	83	63	M48x2	92	100	130	11	32	337	86	245	-
	90	85	108	80								M64x3									
	110	95	133	100								M80x3									
200	90	85	108	80	100	245	1 1/4"	57	70	105	78	M64x3	116	120	165	8	32	415	98	299	-
	110	95	133	100								M80x3									
	140	112	163	128								M100x3									

**PIEDINI LATERALI – MS2 ISO 6020/2**  
**SIDE SUPPORTS – MS2 ISO 6020/2**  
**SUPPORTS LATERALS – MS2 ISO 6020/2**  
**SOSTENOS LATERALES – MS2 ISO 6020/2**



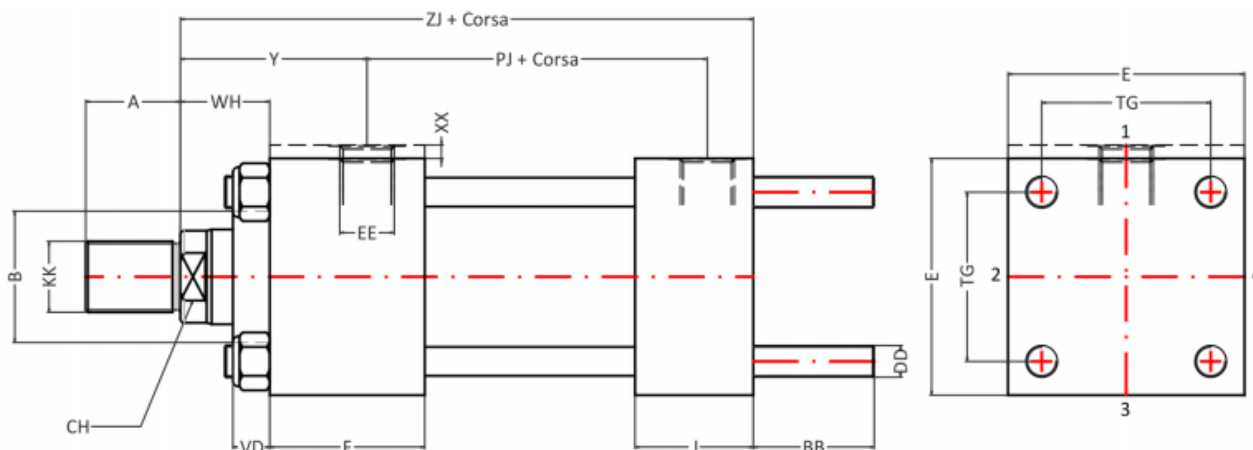
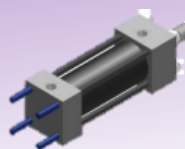
Ø AL	Ø ST	A	B	CH	E	EE	F	J	KK	PJ	SS	TS	US	SB	ST	SH	SW	VD	WH	XS	Y	ZB	ZJ	XX
25	12	14	24	10	40	1/4"	50	33	M10x1,2	53	73	54	70	6,6	8,5	19	17	6	15	33	50	121	114	5
	18	18	30	15					M14x1,5															
32	14	16	26	12	45	1/4"	50	32	M12x1,2	56	73	63	84	9	12,5	22	19	11	25	45	60	137	128	5
	18	18	30	15					M14x1,5															
	22	22	34	18					M16x1,5															
40	18	18	30	15	60	3/8"	55	45	M14x1,5	73	98	83	102	11	12,5	31	20	7	25	45	62	166	153	
	22	22	34	18					M16x1,5									7						
	28	28	42	22					M20x1,5									10						
50	22	22	34	18	75	1/2"	61	45	M16x1,5	74	92	102	126	14	19	37	27	7	25	54	67	176	159	-
	28	28	42	22					M20x1,5									7						
	36	36	50	30					M27x2									10						
63	28	28	42	22	90	1/2"	61	45	M20x1,5	80	86	124	160	18	26	44	31	7	32	65	71	185	168	-
	36	36	50	30					M27x2									10						
	45	45	60	39					M33x2									12						
80	36	36	50	30	114	3/4"	70	50	M27x2	93	105	149	186	18	26	57	36	5	31	68	77	212	190	-
	45	45	60	39					M33x2									9						
	56	56	72	48					M42x2									9						
100	45	45	60	39	130	3/4"	72	50	M33x2	101	102	172	216	26	32	63	41	9	35	79	82	225	203	-
	56	56	72	48					M42x2									9						
	70	63	88	62					M48x2									10						
125	56	56	72	48	165	1"	80	63	M42x2	117	131	210	254	26	32	82	43	9	35	79	86	260	232	-
	70	63	88	62					M48x2									10						
	90	85	108	80					M64x3									10						
160	70	63	88	62	200	1"	83	63	M48x2	130	130	260	318	33	38	101	50	11	32	86	86	279	245	-
	90	85	108	80					M64x3									11						
	110	95	133	100					M80x3									11						
200	90	85	108	80	245	1 1/4"	105	78	M64x3	165	172	311	380	39	44	122	59	8	32	92	98	336	299	-
	110	95	133	100					M80x3									8						
	140	112	163	128					M100x3									8						

**TIRANTI ANTERIORI E POSTERIORI – MX1 ISO 6020/2**  
**FRONT AND REAR TIE RODS – MX1 ISO 6020/2**  
**TIRANTS AVANT ET ARRIERE – MX1 ISO 6020/2**  
**TIRANTES DELANTEROS Y POSTERIORES – MX1 ISO 6020/2**



Ø AL	Ø ST	A	B	CH	E	EE	F	J	KK	DD	BB	TG	VD	WH	Y	PJ	ZJ	XX
25	12	14	24	10	40	1/4"	50	33	M10x1,25	M5x0,8	19	28,3	6	15	50	53	114	5
	18	18	30	15					M14x1,5									
32	14	16	26	12	45	1/4"	50	32	M12x1,25	M6x1	24	33,2	11	25	60	56	128	5
	18	18	30	15					M14x1,5									
	22	22	34	18					M16x1,5									
40	18	18	30	15	60	3/8"	55	45	M14x1,5	M8x1	35	41,7	7	25	62	73	153	
	22	22	34	18					M16x1,5				7					
	28	28	42	22					M20x1,5				10					
50	22	22	34	18	75	1/2"	61	45	M16x1,5	M12x1,25	46	52,3	7	25	67	74	159	-
	28	28	42	22					M20x1,5				7					
	36	36	50	30					M27x2				10					
63	28	28	42	22	90	1/2"	61	45	M20x1,5	M12x1,25	46	64,3	7	32	71	80	168	-
	36	36	50	30					M27x2				10					
	45	45	60	39					M33x2				12					
80	36	36	50	30	114	3/4"	70	50	M27x2	M16x1,5	59	82,7	5	31	77	93	190	-
	45	45	60	39					M33x2				9					
	56	56	72	48					M42x2				9					
100	45	45	60	39	130	3/4"	72	50	M33x2	M16x1,5	59	96,9	9	35	82	101	203	-
	56	56	72	48					M42x2				9					
	70	63	88	62					M48x2				10					
125	56	56	72	48	165	1"	80	63	M42x2	M22x1,5	81	125,9	9	35	86	117	232	-
	70	63	88	62					M48x2				10					
	90	85	108	80					M64x3				10					
160	70	63	88	62	200	1"	83	63	M48x2	M27x2	92	154,9	11	32	86	130	245	-
	90	85	108	80					M64x3				11					
	110	95	133	100					M80x3				11					
200	90	85	108	80	245	1 1/4"	105	78	M64x3	M30x2	115	190,2	8	32	98	165	299	-
	110	95	133	100					M80x3				8					
	140	112	163	128					M100x3				8					

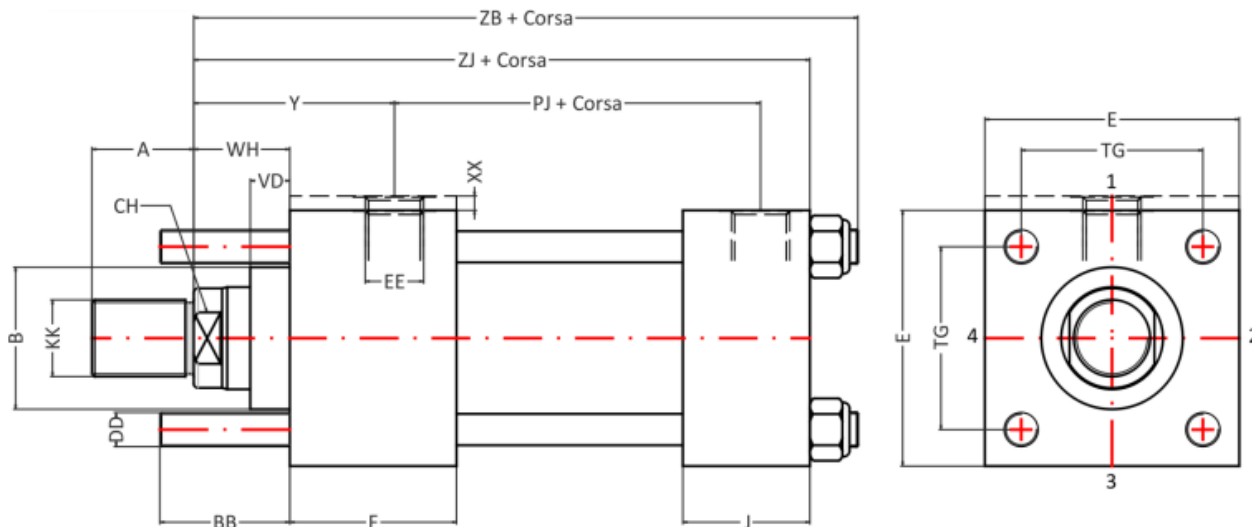
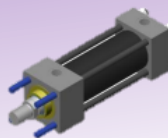
**TIRANTI POSTERIORI – MX2 ISO 6020/2**  
**REAR TIE RODS – MX2 ISO 6020/2**  
**TIRANTS ARRIERE – MX2 ISO 6020/2**  
**TIRANTES POSTERIORES – MX2 ISO 6020/2**



Ø AL	Ø ST	A	B	CH	E	EE	F	J	KK	DD	BB	TG	VD	WH	Y	PJ	ZJ	XX
25	12	14	24	10	40	1/4"	50	33	M10x1,25	M5x0,8	19	28,3	6	15	50	53	114	5
	18	18	30	15					M14x1,5									
32	14	16	26	12	45	1/4"	50	32	M12x1,25	M6x1	24	33,2	11	25	60	56	128	5
	18	18	30	15					M14x1,5									
	22	22	34	18					M16x1,5									
40	18	18	30	15	60	3/8"	55	45	M14x1,5	M8x1	35	41,7	7	25	62	73	153	
	22	22	34	18					M16x1,5				7					
	28	28	42	22					M20x1,5				10					
50	22	22	34	18	75	1/2"	61	45	M16x1,5	M12x1,25	46	52,3	7	25	67	74	159	-
	28	28	42	22					M20x1,5				7					
	36	36	50	30					M27x2				10					
63	28	28	42	22	90	1/2"	61	45	M20x1,5	M12x1,25	46	64,3	7	32	71	80	168	-
	36	36	50	30					M27x2				10					
	45	45	60	39					M33x2				12					
80	36	36	50	30	114	3/4"	70	50	M27x2	M16x1,5	59	82,7	5	31	77	93	190	-
	45	45	60	39					M33x2				9					
	56	56	72	48					M42x2				9					
100	45	45	60	39	130	3/4"	72	50	M33x2	M16x1,5	59	96,9	9	35	82	101	203	-
	56	56	72	48					M42x2				9					
	70	63	88	62					M48x2				10					
125	56	56	72	48	165	1"	80	63	M42x2	M22x1,5	81	125,9	9	35	86	117	232	-
	70	63	88	62					M48x2				10					
	90	85	108	80					M64x3				10					
160	70	63	88	62	200	1"	83	63	M48x2	M27x2	92	154,9	11	32	86	130	245	-
	90	85	108	80					M64x3				11					
	110	95	133	100					M80x3				11					
200	90	85	108	80	245	1 1/4"	105	78	M64x3	M30x2	115	190,2	8	32	98	165	299	-
	110	95	133	100					M80x3				8					
	140	112	163	128					M100x3				8					

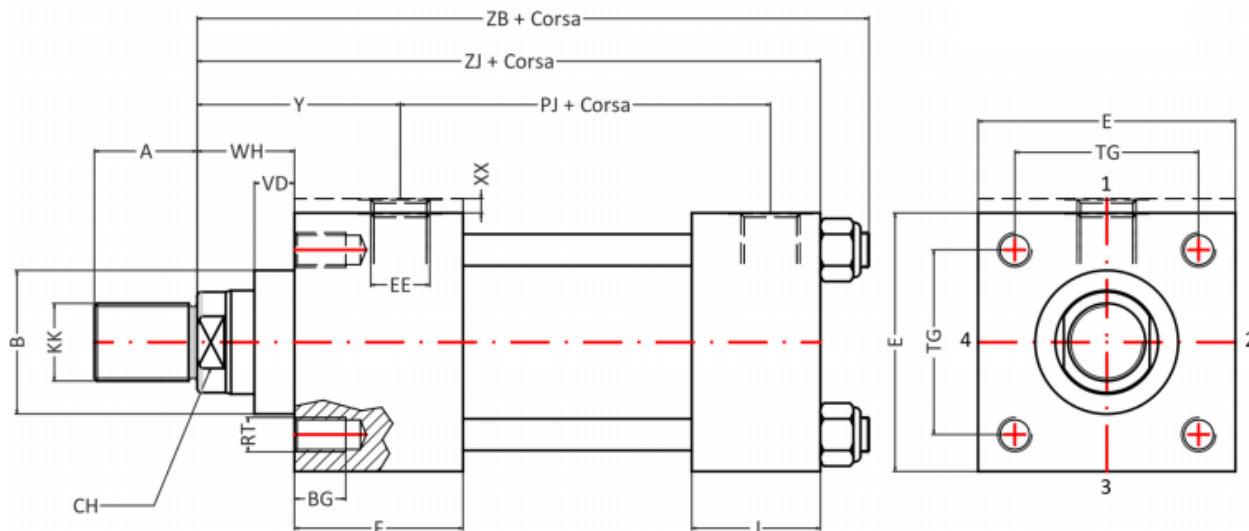
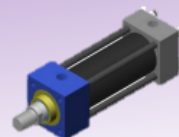


**TIRANTI ANTERIORI – MX3 ISO 6020/2**  
**FRONT TIE RODS – MX3 ISO 6020/2**  
**TIRANTS AVANT- MX3 ISO 6020/2**  
**TIRANTES DELANTEROS – MX3 ISO 6020/2**



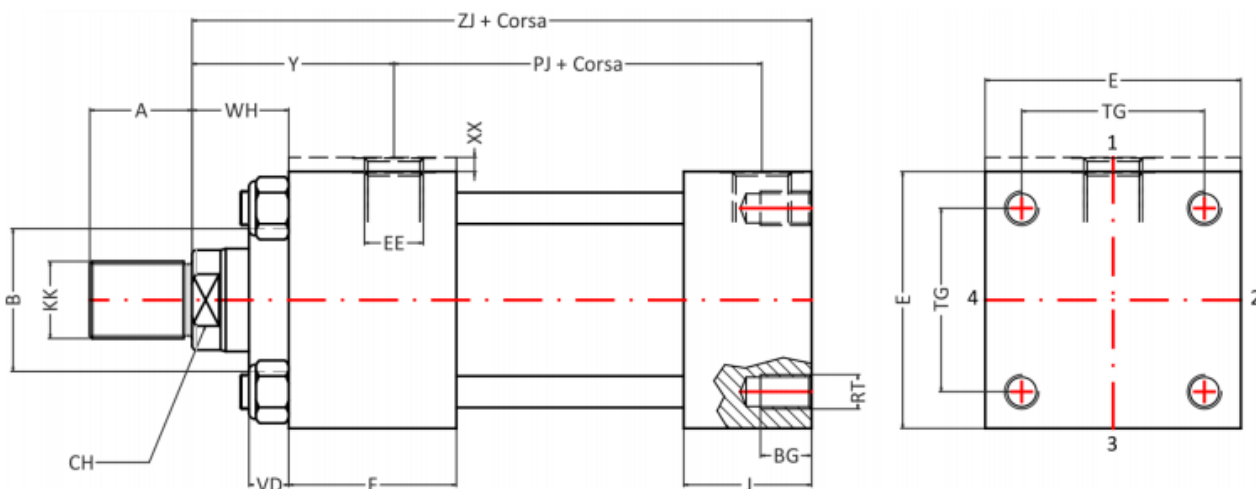
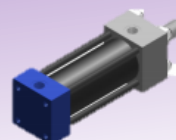
Ø AL	Ø ST	A	B	CH	E	EE	F	J	KK	DD	BB	TG	VD	WH	Y	PJ	ZJ	ZB	XX
25	12	14	24	10	40	1/4"	50	33	M10x1,25	M5x0,8	19	28,3	6	15	50	53	114	121	5
	18	18	30	15					M14x1,5										
32	14	16	26	12	45	1/4"	50	32	M12x1,25	M6x1	24	33,2	11	25	60	56	128	137	5
	18	18	30	15					M14x1,5										
	22	22	34	18					M16x1,5										
40	18	18	30	15	60	3/8"	55	45	M14x1,5	M8x1	35	41,7	7	25	62	73	153	166	
	22	22	34	18					M16x1,5				7						
	28	28	42	22					M20x1,5				10						
50	22	22	34	18	75	1/2"	61	45	M16x1,5	M12x1,25	46	52,3	7	25	67	74	159	176	
	28	28	42	22					M20x1,5				7						
	36	36	50	30					M27x2				10						
63	28	28	42	22	90	1/2"	61	45	M20x1,5	M12x1,25	46	64,3	7	32	71	80	168	185	
	36	36	50	30					M27x2				10						
	45	45	60	39					M33x2				12						
80	36	36	50	30	114	3/4"	70	50	M27x2	M16x1,5	59	82,7	5	31	77	93	190	212	
	45	45	60	39					M33x2				9						
	56	56	72	48					M42x2				9						
100	45	45	60	39	130	3/4"	72	50	M33x2	M16x1,5	59	96,9	9	35	82	101	203	225	
	56	56	72	48					M42x2				9						
	70	63	88	62					M48x2				10						
125	56	56	72	48	165	1"	80	63	M42x2	M22x1,5	81	125,9	9	35	86	117	232	260	
	70	63	88	62					M48x2				10						
	90	85	108	80					M64x3				10						
160	70	63	88	62	200	1"	83	63	M48x2	M27x2	92	154,9	11	32	86	130	245	279	
	90	85	108	80					M64x3										
	110	95	133	100					M80x3										
200	90	85	108	80	245	1 1/4"	105	78	M64x3	M30x2	115	190,2	8	32	98	165	299	330	
	110	95	133	100					M80x3										
	140	112	163	128					M100x3										

**DIRETTO ANTERIORE – MX5 ISO 6020/2**  
**FRONT DIRECT FASTENING – MX5 ISO 6020/2**  
**FIXAGE DIRECT AVANT – MX5 ISO 6020/2**  
**FIJACION DIRECTA DELANTERA – MX5 ISO 6020/2**



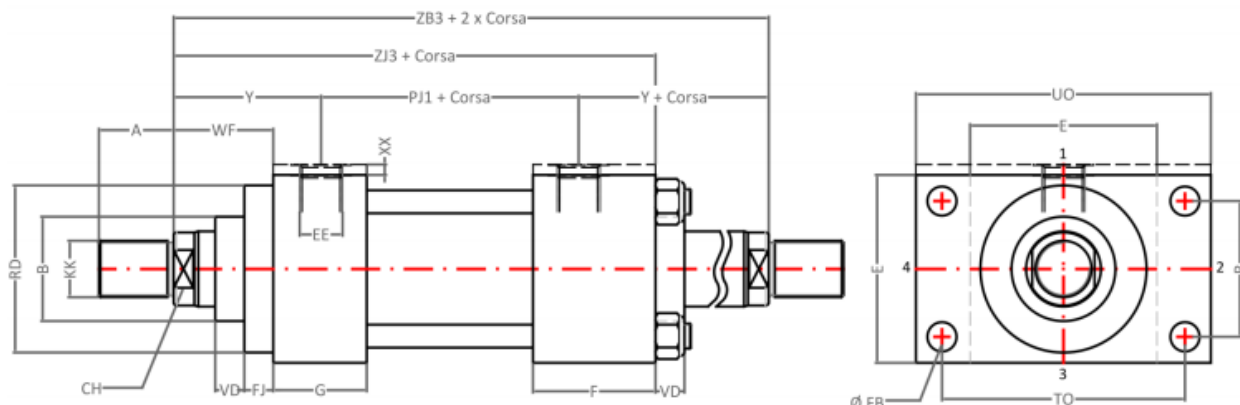
Ø AL	Ø ST	A	B	CH	E	EE	F	J	KK	RT	BG	TG	VD	WH	Y	PJ	ZJ	ZB	XX
25	12	14	24	10	40	1/4"	50	33	M10x1,25	M5x0,8	8	28,3	6	15	50	53	114	121	5
	18	18	30	15					M14x1,5										
32	14	16	26	12	45	1/4"	50	32	M12x1,25	M6x1	9	33,2	11	25	60	56	128	137	5
	18	18	30	15					M14x1,5										
	22	22	34	18					M16x1,5										
40	18	18	30	15	60	3/8"	55	45	M14x1,5	M8x1,25	12	41,7	7	25	62	73	153	166	
	22	22	34	18					M16x1,5				7						
	28	28	42	22					M20x1,5				10						
50	22	22	34	18	75	1/2"	61	45	M16x1,5	M12x1,75	18	52,3	7	25	67	74	159	176	-
	28	28	42	22					M20x1,5				7						
	36	36	50	30					M27x2				10						
63	28	28	42	22	90	1/2"	61	45	M20x1,5	M12x1,75	18	64,3	7	32	71	80	168	185	-
	36	36	50	30					M27x2				10						
	45	45	60	39					M33x2				12						
80	36	36	50	30	114	3/4"	70	50	M27x2	M16x2	24	82,7	5	31	77	93	190	212	-
	45	45	60	39					M33x2				9						
	56	56	72	48					M42x2				9						
100	45	45	60	39	130	3/4"	72	50	M33x2	M16x2	24	96,9	9	35	82	101	203	225	-
	56	56	72	48					M42x2				9						
	70	63	88	62					M48x2				10						
125	56	56	72	48	165	1"	80	63	M42x2	M22x2,5	27	125,9	9	35	86	117	232	260	-
	70	63	88	62					M48x2				10						
	90	85	108	80					M64x3				10						
160	70	63	88	62	200	1"	83	63	M48x2	M27x3	32	154,9	11	32	86	130	245	279	-
	90	85	108	80					M64x3										
	110	95	133	100					M80x3										
200	90	85	108	80	245	1 1/4"	105	78	M64x3	M30x3,5	40	190,2	8	32	98	165	299	330	-
	110	95	133	100					M80x3										
	140	112	163	128					M100x3										

**DIRETTO POSTERIORE - MX6 ISO 6020/2**  
**REAR DIRECT FASTENING - MX6 ISO 6020/2**  
**FIXAGE DIRECT ARRIERE - MX6 ISO 6020/2**  
**FIJACION DIRECTA POSTERIOR - MX6 ISO 6020/2**



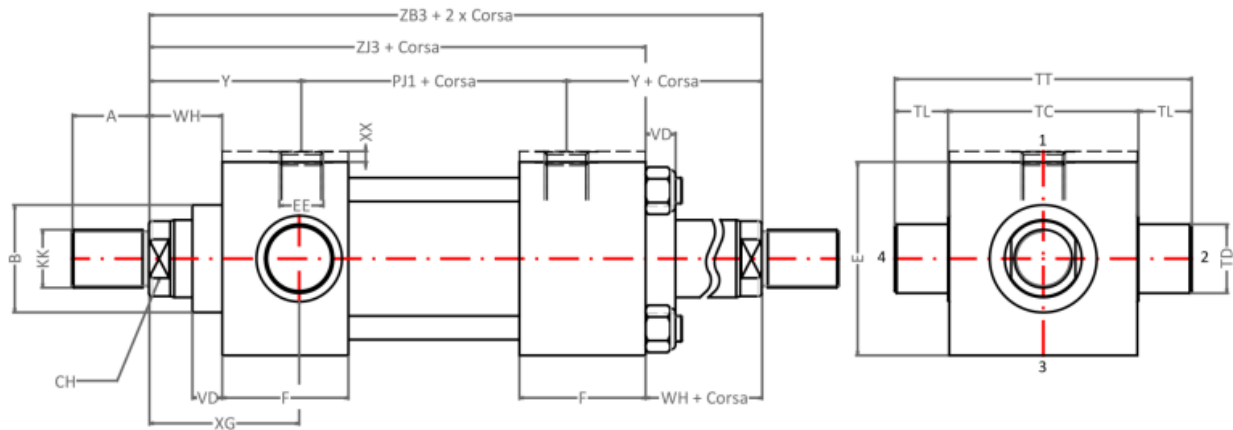
Ø AL	Ø ST	A	B	CH	E	EE	F	J	KK	RT	BG	TG	VD	WH	Y	PJ	ZJ	XX
25	12	14	24	10	40	1/4"	50	33	M10x1,25	M5x0,8	8	28,3	6	15	50	53	114	5
	18	18	30	15					M14x1,5									
32	14	16	26	12	45	1/4"	50	32	M12x1,25	M6x1	9	33,2	11	25	60	56	128	5
	18	18	30	15					M14x1,5									
	22	22	34	18					M16x1,5									
40	18	18	30	15	60	3/8"	55	45	M14x1,5	M8x1,25	12	41,7	7	25	62	73	153	
	22	22	34	18					M16x1,5				7					
	28	28	42	22					M20x1,5				10					
50	22	22	34	18	75	1/2"	61	45	M16x1,5	M12x1,75	18	52,3	7	25	67	74	159	-
	28	28	42	22					M20x1,5				7					
	36	36	50	30					M27x2				10					
63	28	28	42	22	90	1/2"	61	45	M20x1,5	M12x1,75	18	64,3	7	32	71	80	168	-
	36	36	50	30					M27x2				10					
	45	45	60	39					M33x2				12					
80	36	36	50	30	114	3/4"	70	50	M27x2	M16x2	24	82,7	5	31	77	93	190	-
	45	45	60	39					M33x2				9					
	56	56	72	48					M42x2				9					
100	45	45	60	39	130	3/4"	72	50	M33x2	M16x2	24	96,9	9	35	82	101	203	-
	56	56	72	48					M42x2				9					
	70	63	88	62					M48x2				10					
125	56	56	72	48	165	1"	80	63	M42x2	M22x2,5	27	125,9	9	35	86	117	232	-
	70	63	88	62					M48x2				10					
	90	85	108	80					M64x3				10					
160	70	63	88	62	200	1"	83	63	M48x2	M27x3	32	154,9	11	32	86	130	245	-
	90	85	108	80					M64x3									
	110	95	133	100					M80x3									
200	90	85	108	80	245	1 1/4"	105	78	M64x3	M30x3,5	40	190,2	8	32	98	165	299	-
	110	95	133	100					M80x3									
	140	112	163	128					M100x3									

**FLANGIA ANTERIORE DOPPIO STELO – ME5 ISO 6020/2**  
**FRONT FLANGE DOUBLE ROD – ME5 ISO 6020/2**  
**FLANGE AVANT DOUBLE TIGE – ME5 ISO 6020/2**  
**BRIDA DELANTERA DOBLE VASTAGO – ME5 ISO 6020/2**



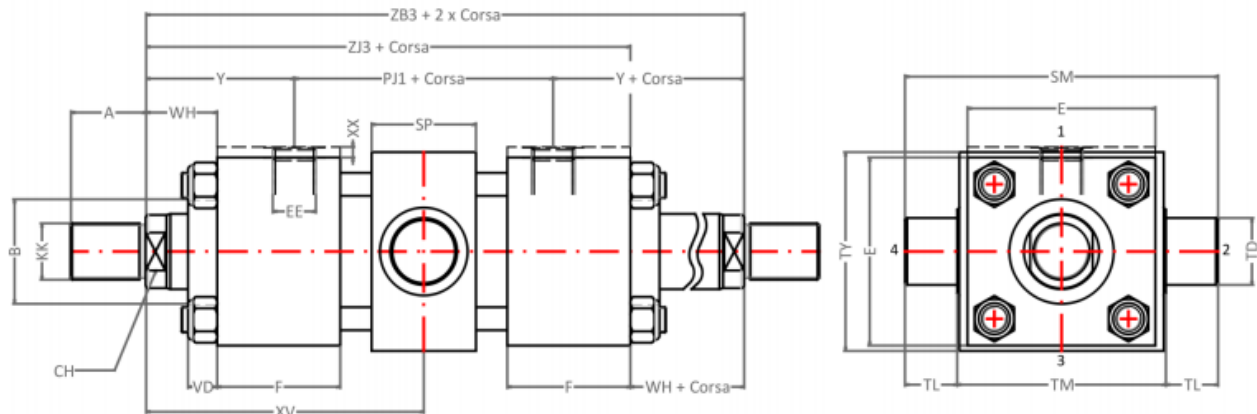
Ø AL	Ø ST	A	B	CH	E	EE	F	FB	FJ	G	KK	PJ1	R	RD	TO	UO	VD	WF	Y	ZB3	ZJ3	XX
25	12	14	24	10	40	1/4"	50	5,5	9	40	M10x1,25	46	27	38	51	64	6	25	50	146	131	5
	18	18	30	15							M14x1,5											
32	14	16	26	12	45	1/4"	50	6,6	9	40	M12x1,25	51	33	42	58	70	11	35	60	171	146	5
	18	18	30	15							M14x1,5											
	22	22	34	18							M16x1,5											
40	18	18	30	15	60	3/8"	55	11	10	45	M14x1,5	64	41	62	87	106	7	35	62	188	163	
	22	22	34	18							M16x1,5						7					
	28	28	42	22							M20x1,5						10					
50	22	22	34	18	75	1/2"	61	14	14	45	M16x1,5	66	52	74	105	128	7	41	67	200	175	-
	28	28	42	22							M20x1,5						7					
	36	36	50	30							M27x2						10					
63	28	28	42	22	90	1/2"	61	14	14	45	M20x1,5	74	65	75	117	142	7	48	71	216	187	-
	36	36	50	30							M27x2						10					
	45	45	60	39							M33x2						12					
80	36	36	50	30	114	3/4"	70	18	19	50	M27x2	87	83	82	149	180	5	51	77	241	210	-
	45	45	60	39							M33x2						9					
	56	56	72	48							M42x2						9					
100	45	45	60	39	130	3/4"	72	18	19	50	M33x2	96	97	92	125	162	9	57	82	260	225	-
	56	56	72	48							M42x2						9					
	70	63	88	62							M48x2						10					
125	56	56	72	48	165	1"	80	22	21	58	M42x2	112	126	105	208	250	9	57	86	284	249	-
	70	63	88	62							M48x2						10					
	90	85	108	80							M64x3						10					
160	70	63	88	62	200	1"	83	26	21	58	M48x2	125	155	125	253	300	11	57	86	297	265	-
	90	85	108	80							M64x3						11					
	110	95	133	100							M80x3						170					
200	90	85	108	80	245	1 1/4"	105	33	24	80	M64x3	162	190	150	300	360	8	57	98	358	326	-
	110	95	133	100							M80x3						8					
	140	112	163	128							M100x3						210					

**OSCILLANTE ANTERIORE DOPPIO STELO – MT1 ISO 6020/2**  
**FRONT AND SWINGING FASTENING, DOUBLE ROD – MT1 ISO 6020/2**  
**FIXAGE OSCILLANT AVANT, DOUBLE TIGE – MT1 ISO 6020/2**  
**FIJACION OSCILANTE DELANTERA, DOBLE VASTAGO – MT1 ISO 6020/2**



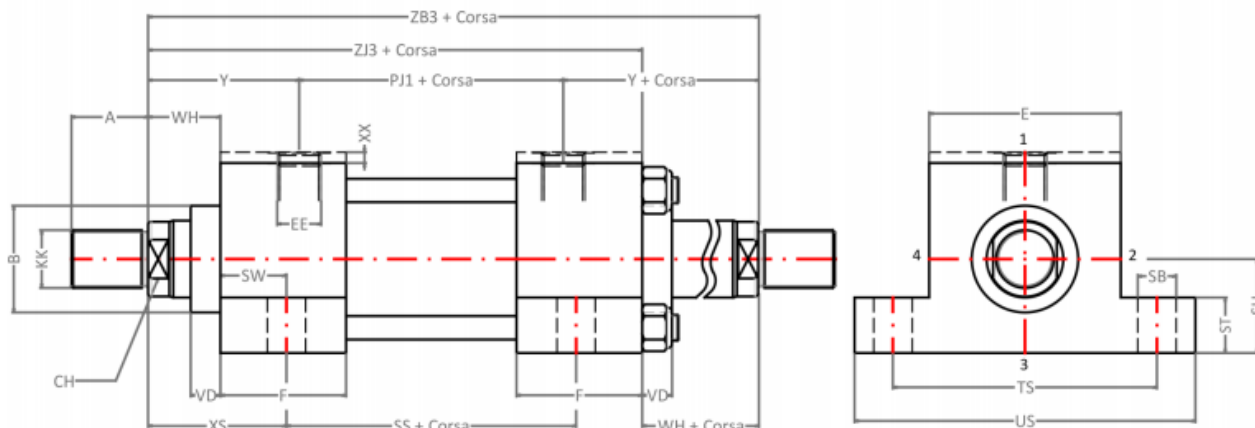
Ø AL	Ø ST	A	B	CH	E	EE	F	KK	PJ1	TC	TD	TL	TT	VD	WH	XG	Y	ZB3	ZJ3	XX
25	12	14	24	10	40	1/4"	50	M10x1,25	46	38	12	10	58	6	15	44	50	146	131	5
	18	18	30	15				M14x1,5												
32	14	16	26	12	45	1/4"	50	M12x1,25	51	44	16	12	68	11	25	54	60	171	146	5
	18	18	30	15				M14x1,5												
	22	22	34	18				M16x1,5												
40	18	18	30	15	60	3/8"	55	M14x1,5	64	63	20	16	95	7	25	57	62	188	163	
	22	22	34	18				M16x1,5						7						
	28	28	42	22				M20x1,5						10						
50	22	22	34	18	75	1/2"	61	M16x1,5	66	76	25	20	116	7	25	64	67	200	175	-
	28	28	42	22				M20x1,5						7						
	36	36	50	30				M27x2						10						
63	28	28	42	22	90	1/2"	61	M20x1,5	74	89	32	25	139	7	32	70	71	216	187	-
	36	36	50	30				M27x2						10						
	45	45	60	39				M33x2						12						
80	36	36	50	30	114	3/4"	70	M27x2	87	114	40	32	178	5	31	76	77	241	210	-
	45	45	60	39				M33x2						9						
	56	56	72	48				M42x2						9						
100	45	45	60	39	130	3/4"	72	M33x2	96	127	50	40	207	9	35	71	82	260	225	-
	56	56	72	48				M42x2						9						
	70	63	88	62				M48x2						10						
125	56	56	72	48	165	1"	80	M42x2	112	165	63	50	265	9	35	75	86	284	249	-
	70	63	88	62				M48x2						10						
	90	85	108	80				M64x3						10						
160	70	63	88	62	200	1"	83	M48x2	125	203	80	63	329	11	32	75	86	297	265	-
	90	85	108	80				M64x3						11						
	110	95	133	100				M80x3						11						
200	90	85	108	80	245	1 1/4"	105	M64x3	162	241	100	80	401	8	32	85	98	358	326	-
	110	95	133	100				M80x3						8						
	140	112	163	128				M100x3						8						

**OSCILLANTE INTERMEDIO DOPPIO STELO – MT4 ISO 6020/2**  
**MIDDLE AND SWINGING FASTENING, DOUBLE ROD – MT4 ISO 6020/2**  
**FIXAGE OSCILLANT AU MILIEU, DOUBLE TIGE – MT4 ISO 6020/2**  
**FIJACION OSCILANTE MEDIA, DOBLE VASTAGO – MT4 ISO 6020/2**



Ø AL	Ø ST	A	B	CH	E	EE	F	KK	PJ1	SM	SP	TD	TL	TM	TY	WH	XV min	Y	ZB3	ZJ3	XX
25	12	14	24	10	40	1/4"	50	M10x1,25	46	68	20	12	10	48	45	15	75	50	146	131	5
	18	18	30	15				M14x1,5													
32	14	16	26	12	45	1/4"	50	M12x1,25	51	79	25	16	12	55	52	25	88	60	171	146	5
	18	18	30	15				M14x1,5													
	22	22	34	18				M16x1,5													
40	18	18	30	15	60	3/8"	55	M14x1,5	64	108	30	20	16	76	76	25	95	62	188	163	
	22	22	34	18				M16x1,5													
	28	28	42	22				M20x1,5													
50	22	22	34	18	75	1/2"	61	M16x1,5	66	129	40	25	20	89	90	25	106	67	200	175	-
	28	28	42	22				M20x1,5													
	36	36	50	30				M27x2													
63	28	28	42	22	90	1/2"	61	M20x1,5	74	150	50	32	25	100	95	32	118	71	216	187	-
	36	36	50	30				M27x2													
	45	45	60	39				M33x2													
80	36	36	50	30	114	3/4"	70	M27x2	87	191	50	40	32	127	120	31	126	77	241	210	-
	45	45	60	39				M33x2													
	56	56	72	48				M42x2													
100	45	45	60	39	130	3/4"	72	M33x2	96	220	60	50	40	140	140	35	137	82	260	225	-
	56	56	72	48				M42x2													
	70	63	88	62				M48x2													
125	56	56	72	48	165	1"	80	M42x2	112	278	70	63	50	178	178	35	150	86	284	249	-
	70	63	88	62				M48x2													
	90	85	108	80				M64x3													
160	70	63	88	62	200	1"	83	M48x2	125	341	90	80	63	215	216	32	160	86	297	265	-
	90	85	108	80				M64x3													
	110	95	133	100				M80x3													
200	90	85	108	80	245	1 1/4"	105	M64x3	162	439	110	100	80	279	280	32	192	98	358	326	-
	110	95	133	100				M80x3													
	140	112	163	128				M100x3													

**PIEDINI LATERALI DOPPIO STELO- MS2 ISO 6020/2**  
**SIDE SUPPORTS, DOUBLE ROD - MS2 ISO 6020/2**  
**SUPPORTS LATERALS, DOUBLE TIGE - MS2 ISO 6020/2**  
**SOSTENOS LATERALES, DOBLE VASTAGO - MS2 ISO 6020/2**



Ø AL	Ø ST	A	B	CH	E	EE	F	KK	PJ1	SS1	TS	US	SB	ST	SH	SW	VD	WH	XS	Y	ZB3	ZJ3	XX
25	12	14	24	10	40	1/4"	50	M10x1,25	46	80	54	70	6,6	8,5	19	17	6	15	33	50	146	131	5
	18	18	30	15				M14x1,5															
32	14	16	26	12	45	1/4"	50	M12x1,25	51	81	63	84	9	12,5	22	19	11	25	45	60	171	146	5
	18	18	30	15				M14x1,5															
	22	22	34	18				M16x1,5															
40	18	18	30	15	60	3/8"	55	M14x1,5	64	98	83	102	11	12,5	31	20	7	25	45	62	188	163	
	22	22	34	18				M16x1,5															
	28	28	42	22				M20x1,5															
50	22	22	34	18	75	1/2"	61	M16x1,5	66	92	102	126	14	19	37	27	7	25	54	67	200	175	-
	28	28	42	22				M20x1,5															
	36	36	50	30				M27x2															
63	28	28	42	22	90	1/2"	61	M20x1,5	74	86	124	160	18	26	44	31	7	32	65	71	216	187	-
	36	36	50	30				M27x2															
	45	45	60	39				M33x2															
80	36	36	50	30	114	3/4"	70	M27x2	87	105	149	186	18	26	57	36	5	31	68	77	241	210	-
	45	45	60	39				M33x2															
	56	56	72	48				M42x2															
100	45	45	60	39	130	3/4"	72	M33x2	96	102	172	216	26	32	63	41	9	35	79	82	260	225	-
	56	56	72	48				M42x2															
	70	63	88	62				M48x2															
125	56	56	72	48	165	1"	80	M42x2	112	126	210	254	26	32	82	43	9	35	79	86	284	249	-
	70	63	88	62				M48x2															
	90	85	108	80				M64x3															
160	70	63	88	62	200	1"	83	M48x2	125	125	260	318	33	38	101	50	11	32	86	86	297	265	-
	90	85	108	80				M64x3															
	110	95	133	100				M80x3															
200	90	85	108	80	245	1 1/4"	105	M64x3	162	174	311	380	39	44	122	59	8	32	92	98	358	326	-
	110	95	133	100				M80x3															
	140	112	163	128				M100x3															

**SENSORI PER CILINDRI MAGNETICI ETCM**  
**SENSORS FOR MAGNETIC CYLINDER ETCM**  
**CAPTEURS POUR VERINS MAGNETIQUES ETCM**  
**SENSORES PARA CILINDROS MAGNETICOS ETCM**



I cilindri della serie ETCM sono predisposti per l'utilizzo di sensori magnetici da montare sui tiranti tramite un'apposita staffa. Il segnale generato da questi sensori viene utilizzato per eseguire azionamenti in posizione intermedia o in prossimità del finecorsa del pistone.



Cylinders ETCM series can be equipped by magnetic sensors that can be mounted on tie rods by bracket. The signal generated allows drives in an intermediate position or near the limit of the piston.



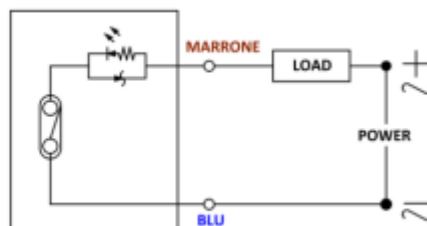
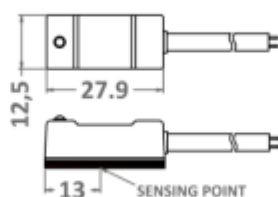
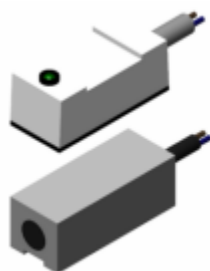
Les cylindres de la série ETCM peuvent être équipés par de capteurs magnétiques à monter sur les tirants par un étrier. Le signal généré permet les actionnement dans une position intermédiaire ou en proximité de la limite du piston.



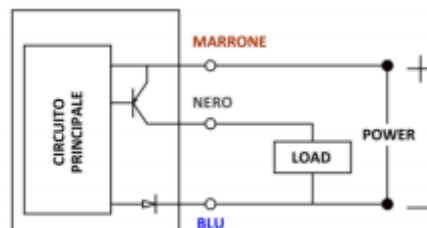
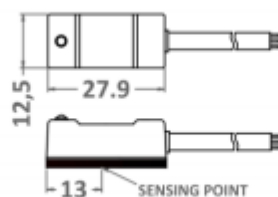
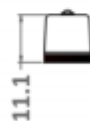
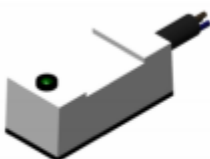
Cilindros de la serie ETCM pueden ser equipados con sensores magnéticos montados sobre los pernos a través del soporte. La señal generada permite salidas en una posición intermedia o cerca del final del pistón.

SM-001	SM-002	SM-003	SM--004
REED	REED	HALL	ELETTRONICO MAGNETOTENSIVO
Ø 4 – 2 fili – 3 mt	Ø3 – 2 fili – 5 mt	Ø4 – 3 fili – 3 mt	Ø6 – 4 fili – 3 mt
5~240V DC/AC	5~240V DC/AC	5~30V DC	5~24V DC
-10~70° C	-10~150° C	-10~70° C	-10~80° C

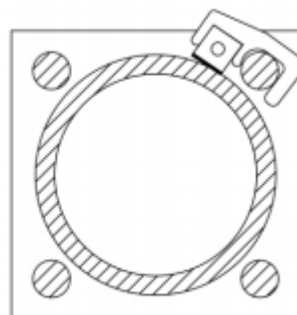
**SM-001 - SM-002 :**



**SM-003 :**



MONTAGGIO >>>>  
 MOUNTING >>>>  
 MONTAGE >>>>  
 MONTAJE >>>>

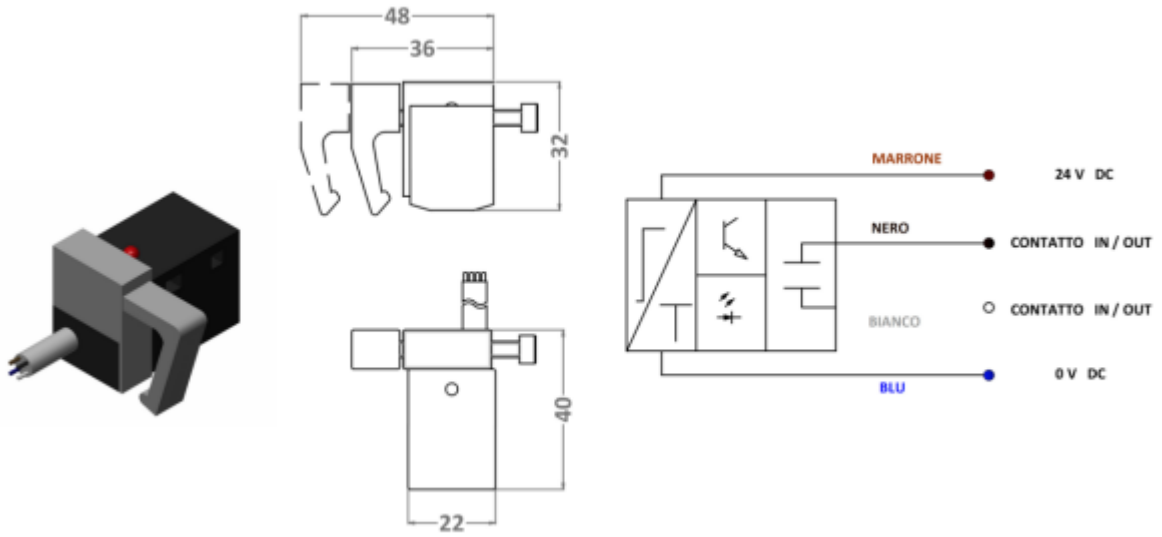




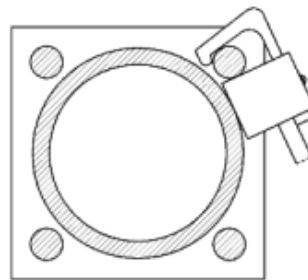
**SENSORI PER CILINDRI MAGNETICI *ETCM***  
**SENSORS FOR MAGNETIC CYLINDER *ETCM***  
**CAPTEURS POUR VERINS MAGNETIQUES *ETCM***  
**SENSORES PARA CILINDROS MAGNETICOS *ETCM***



**SM-004 :**



MONTAGGIO >>>>  
 MOUNTING >>>>  
 MONTAGE >>>>  
 MONTAJE >>>>



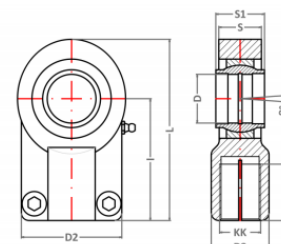
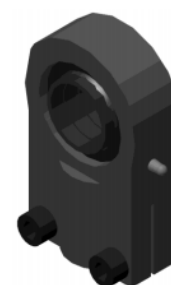


## ACCESSORI - ACCESSORIES - ACCESSOIRES - ACCESSORIOS

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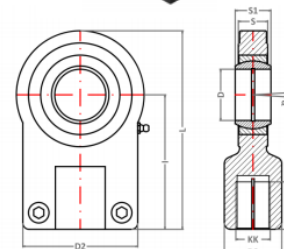
- **SNODO ISO 6982 - JUNCTION ISO 6982**  
**NOEUD ISO 6982 - ARTICULACION ISO 6982**

STELO	KK	Lk	∅D	S	S1	D3	D2	I	L	CODICE
12	-	-	-	-	-	-	-	-	-	-
14	M12x1,25	17	12	11	12	16	32	38	54	TS-01.12CE
18	M14x1,5	19	16	13,8	16	21	40	44	64	TS-01.16CE
22	M16x1,5	23	20	17,8	20	25	47	52	75	TS-01.20CE
28	M20x1,5	29	25	21,9	25	30	54	65	96	TS-01.25CE
36	M27x2	37	32	27,5	32	38	66	80	118,5	TS-01.32CE
45	M33x2	46	40	27,5	40	47	80	97	146,1	TS-01.40CE
56	M42x2	57	50	41	50	58	96	120	179,6	TS-01.50CE
70	M48x2	64	63	53	63	70	114	140	211,6	TS-01.63CE
90	M64x3	86	80	67	80	90	148	180	270,6	TS-01.80CE
110	M80x3	96	100	86	100	110	178	210	322,7	TS-01.100CE
140	M100x3	113	125	105	125	135	200	260	405,7	TS-01.125CE



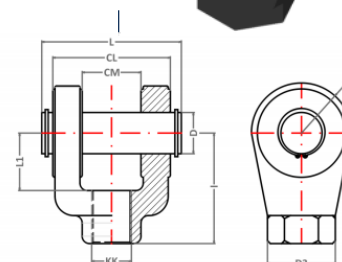
- **SNODO DIN 24555 - JUNCTION DIN 24555**  
**NOEUD DIN 24555 - ARTICULACION DIN 24555**

STELO	KK	Lk	∅D	S	S1	D3	D2	I	L	α	CODICE
12	M10x1,25	15	12	8	10	17	35	42	59,5	11°	TS-01.12S
14	M12x1,25	17	16	11	14	21	45	48	70,5	10°	TS-01.16S
18	M14x1,5	19	20	13	16	25	55	58	85,5	9°	TS-01.20S
22	M16x1,5	23	25	17	20	30	62	68	100,5	7°	TS-01.25S
28	M20x1,5	29	30	19	22	36	77	85	125	6°	TS-01.30S
36	M27x2	37	40	23	28	45	90	105	155	7°	TS-01.40S
45	M33x2	46	50	30	35	55	105	130	190	6°	TS-01.50S
56	M42x2	57	60	38	44	68	134	150	230	6°	TS-01.60S
70	M48x2	64	80	47	55	90	156	185	287,5	6°	TS-01.80S
90	M64x3	86	100	57	70	110	190	240	360	6°	TS-01.100S



- **FORCELLA COMPLETA DI PERNO ISO 8133 - FORK WITH PIN ISO 8133**  
**FOURCHE AVEC PIN ISO 8133 - HORQUILLA CON PIVOTE ISO 8133**

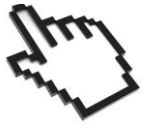
STELO	KK	CM	∅D	CL	L	D3	L1	I	R	CODICE
12	M10x1,25	12	10	24	34	19	13	32	12	TS-02.10
14	M12x1,25	16	12	32	43	21	19	36	17	TS-02.12
18	M14x1,5	20	14	40	51	21	19	38	17	TS-02.14
22	M16x1,5	30	20	60	73	32	32	54	29	TS-02.16
28	M20x1,5	30	20	60	73	32	32	60	29	TS-02.20
36	M27x2	40	28	80	95	40	39	75	34	TS-02.27
45	M33x2	50	36	100	117	56	54	99	50	TS-02.33
56	M42x2	60	45	120	139	56	57	113	53	TS-02.42
70	M48x2	70	56	140	161	75	63	126	59	TS-02.48
90	M64x3	80	70	160	181	95	83	168	78	TS-02.64
110	M80x3	80	70	160	181	95	83	168	78	TS-02.80





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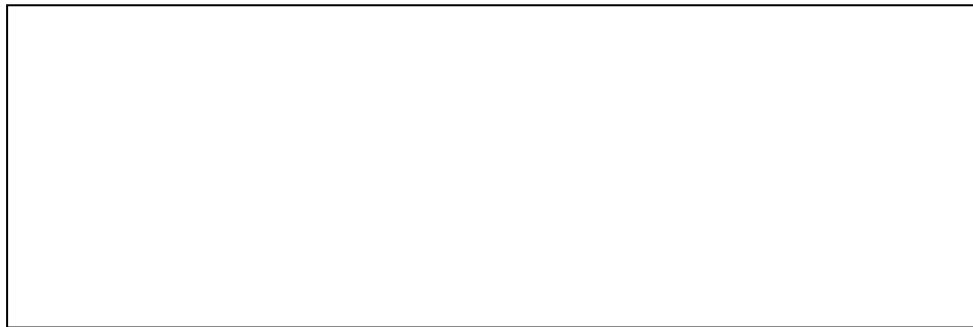
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